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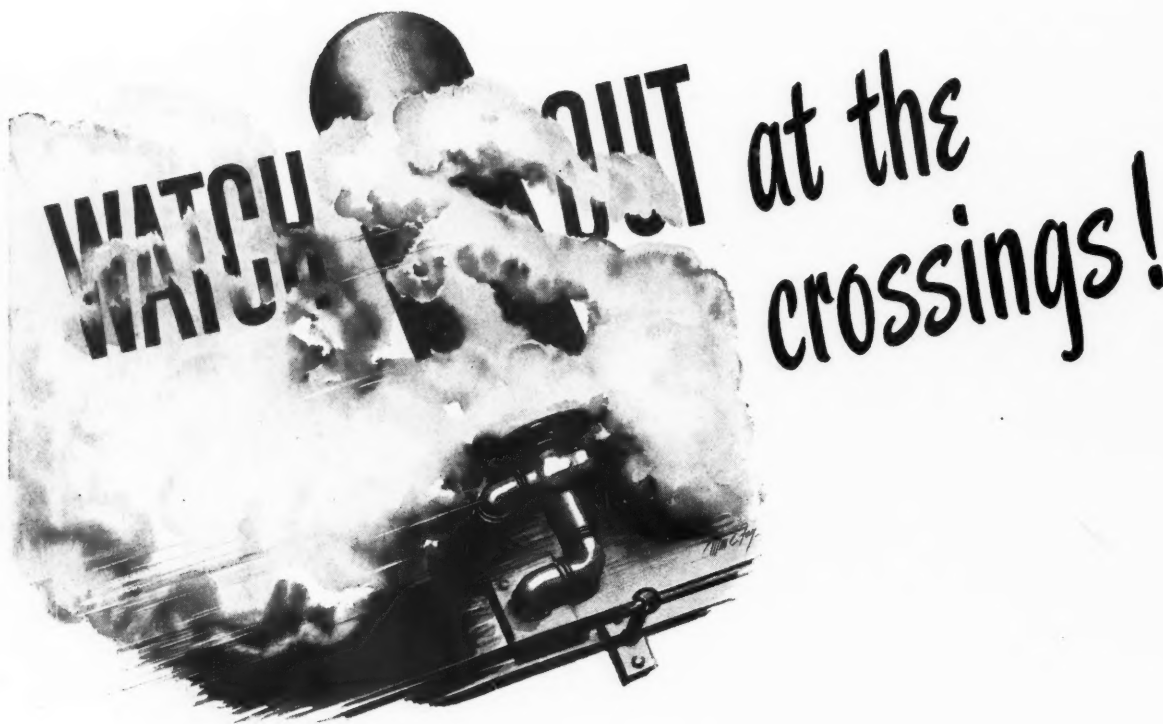
Printed
VWC

The Inland Printer

R

v. 117

Apr. - Sept. 1946



American business goes on with its plans for years of prosperity, all obstacles notwithstanding. Free economy has helped make this country what it is, and an aroused people will play rough with anything that blocks the crossings. Backward concerns, too, will be ground under the wheels of progressive, onrushing business. In this powerful drive toward continuous prosperity, advertising will furnish the fuel, much of it in the form of printed material. Champion paper continues to be a favorite everywhere, with its wide assortment of coated and uncoated for letterpress and offset, business papers, envelope, tablet writing, papeterie and specials. Keep your steam up with good advertising on Champion paper.

THE *Champion Paper* AND FIBRE COMPANY... HAMILTON, OHIO



Manufacturers of advertisers' and publishers' coated and uncoated papers, bristols, bonds, envelope papers, tablet writing and papeterie . . . 2,000,000 pounds a day
MILLS AT HAMILTON, OHIO . . . CANTON, N. C. . . HOUSTON, TEXAS

District Sales Offices

NEW YORK • CHICAGO • PHILADELPHIA • CLEVELAND • BOSTON • ST. LOUIS • CINCINNATI • ATLANTA • SAN FRANCISCO

Ref



PUBLIC LIBRARY

APR 10 1946

DETROIT

Ludlow Helps Solve Your **Production Problems**

- 1.** Lowers setting time—Ludlow matrices “gathered” rather than set singly.
- 2.** Eliminates looking for sorts—Ludlow matrices always ready in cases.
- 3.** Reduces justification time—Ludlow space matrices easy to insert and remove.
- 4.** Lessens make-up time—Ludlow sluglines are assembled quickly and easily.
- 5.** Requires less time and care tying up pages, handling forms and jobs, etc.
- 6.** Reduces lock-up time—Ludlow-set forms have larger and fewer units.
- 7.** Lessens proofreading time—Ludlow sluglines, once read and corrected, stay correct.
- 8.** Lowers press running time—Ludlow-set forms reduce danger of work-ups. *Ask us for further details about these and other Ludlow advantages.*

Elrod

equipment in your plant assures abundance of high-quality leads, slugs, rule and base material.

Ludlow Typograph Company 2032 Clybourn Avenue, Chicago 14

Published monthly by Maclean-Hunter Publishing Corporation, 309 West Jackson Boulevard, Chicago 6, Illinois. Subscription, \$4.00 a year in advance; single copies, 40 cents. (Send Canadian funds—\$4.50 a year; single copies, 45 cents—to The Inland Printer, Terminal A, P. O. Box 100, Toronto.) Foreign \$5.00 a year; single copies, 50 cents. Entered as second-class matter, June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3, 1879. Copyrighted, 1946, Maclean-Hunter Publishing Corporation.

SELL THE CREAM OF THE CROP
of printed, lithographed or ruled forms
WITH THESE WESTON PAPERS

BYRON WESTON CO. LINEN RECORD
Extra No. 1, 100% new white Cotton and Linen Clippings

WESTON'S DEFIANCE LEDGER
100% Cotton Fibre Content

WESTON'S WAVERLY LEDGER
75% Cotton Fibre Content

WESTON'S CENTENNIAL LEDGER
75% Cotton Fibre Content

WESTON'S BOND
Extra No. 1, 100% new Cotton Fibre Content

WESTON'S DEFIANCE BOND
100% Cotton Fibre Content

WESTON'S HOLMESDALE BOND
75% Cotton Fibre Content

The grade A part of form business is at the top. You can get more of this profitable business by featuring the WESTON quality papers listed above. Made by the leading specialists in record papers, they have the strength and resistance to time and handling as well as fine appearance and printing and ruling qualities that guarantees lasting satisfaction.

**KEEP RECORDS WORTH KEEPING
ON WESTON PAPERS**

BYRON WESTON COMPANY • DALTON • MASSACHUSETTS

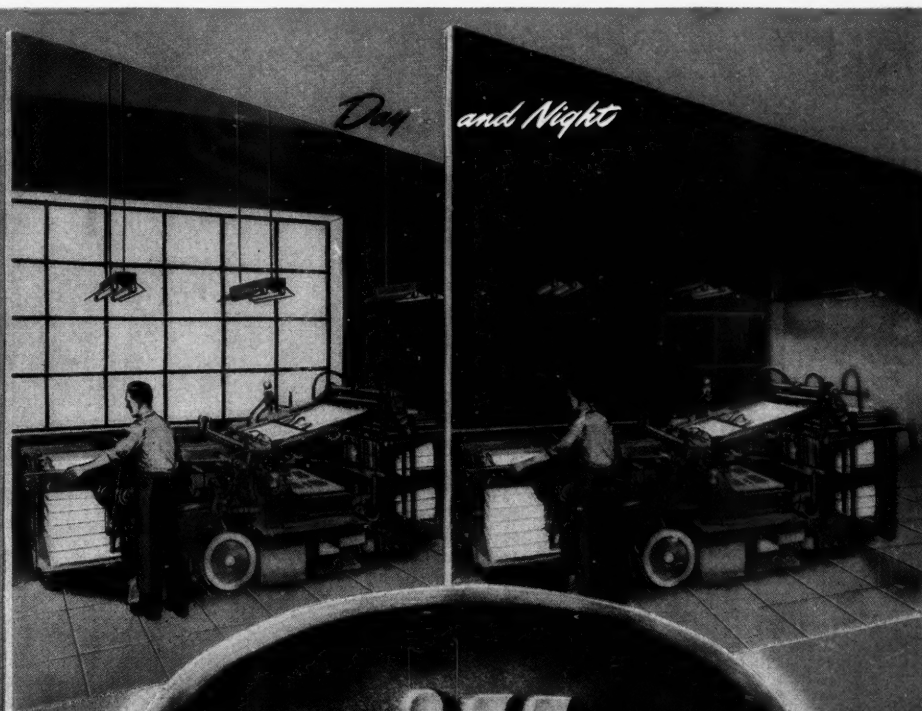
Weston

*Makers of Papers
for Business Records*





DURING the war, total repair parts and supplies costs for Miller equipment averaged only 1/450, really less than 1/4 of 1%, of the value of all Miller equipment sold before the war . . . substantiating the low cost durability of Miller machinery as stated in the wartime expression reprinted below.



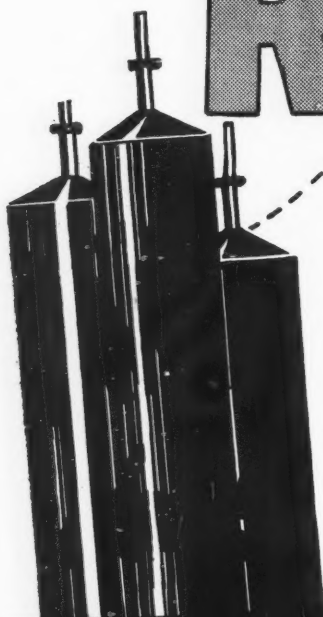
Reserve Stamina . . .

The capacity of Miller machinery to produce without stop
regardless of the length of the run is the reserve
stamina that makes Miller machinery the most reliable
and economical in the industry.

TIME FOR

Summer

ROLLERS



• Don't wait for the first robin to remind you about summer rollers. Don't get caught unprepared in a sudden hot spell. Take action today. Order **AMERICAN Composition SUMMER ROLLERS** now. They'll come to you pre-conditioned for efficient, trouble-free service. We give them everything it takes to perform perfectly in the toughest temperatures. You'll find them durable, dependable, capable. Produced by highly skilled roller craftsmen in one of today's most modern roller plants, there is no finer roller made. Order them today.

• **AMERICAN ALL-SYNTHETIC RUBBER ROLLERS** are "tops," too. They'll surprise you with their definite dependability for magazine, newspaper, rotary and offset presses. Exact in diameter and stay so. Handle ink perfectly. Unaffected by heat, cold, humidity. Impervious to inks, driers, oils, etc. Order a set now.

FOR THIS SEASON GET
american
PRE-CONDITIONED QUALITY

MANUFACTURERS OF
SYNTHETIC
RUBBER ROLLERS
COMPOSITION ROLLERS
LITHOGRAPH ROLLERS
MAKE READY PASTE
PADDING GLUE

AMERICAN ROLLER COMPANY

1342 NORTH HALSTED STREET
225 NORTH NEW JERSEY STREET

CHICAGO 22, ILLINOIS
INDIANAPOLIS 4, INDIANA

FINE COATED PAPER NEEDS NO OTHER NAME

To achieve higher quality at lower costs, America has led the way in devising better methods for making almost everything. Such a development came when Consolidated "streamlined" the making of coated paper . . . resulting in a better product for less. *Though higher in quality and lower in price, it remains fine coated paper and needs no other name.*



Consolidated COATED *Papers* **AT UNCOATED PAPER PRICES**

With their extremes in hi-lights and shadows and a myriad of tone gradations, silver, china and glass are difficult to reproduce. The perfectly smooth, enamel surfaces of Consolidated Coated Papers have been perfected to reproduce such articles with all the beauty of the originals.

That is why Consolidated Coated Papers are *specified by leading advertisers* for their choicest printing . . . *recommended by printers* from coast to coast . . . and *used by many of America's most widely read national magazines*, trade and technical journals.

PRODUCTION GLOSS...MODERN GLOSS

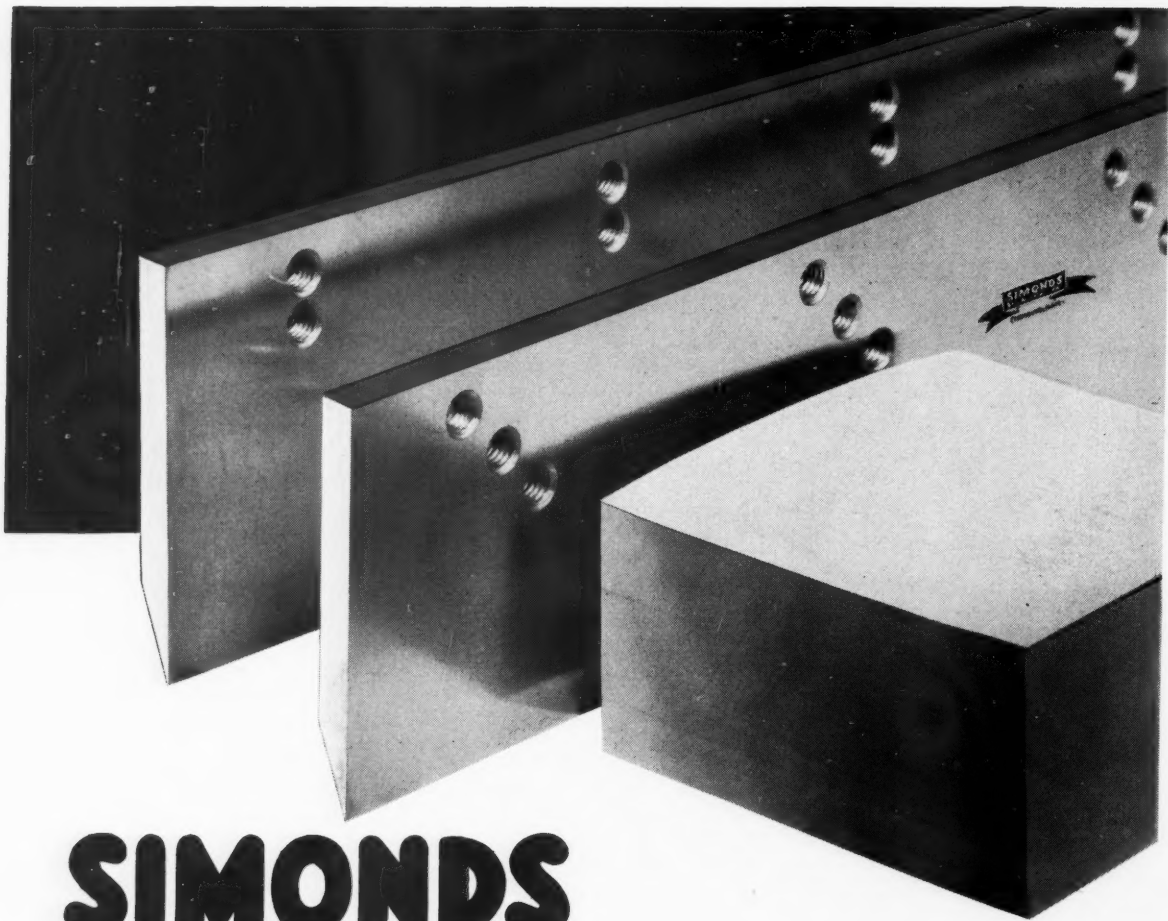
One of these Consolidated Grades (weights down to 45 lbs.) will meet almost every printing need.

CONSOLIDATED WATER POWER & PAPER COMPANY

MAIN OFFICES
WISCONSIN RAPIDS, WISCONSIN

Four Modern Mills . . . All in Wisconsin

SALES OFFICES
125 SO. LA SALLE ST., CHICAGO



SIMONDS

S-301 STEEL

PAPER KNIVES

ARE

Concave-Ground

**...to Cut More Cleanly
...Easily...Accurately**

Simonds special method of precision grinding makes the entire knife-face slightly concave. And this concavity... together with a taper ground from back edge to bevel... maintains a clearance that prevents "face drag" against the stock. That's why Simonds Knives cut

cleanly, accurately... and as easily as your own desk shears.

And they *keep on* cutting that way far longer than regular knives, because of the exceptional edge-holding quality of S-301 Steel, specially formulated for paper-cutting and poured in Simonds Steel Mills, then heat-treated for correct hardness and temper. So for lowest knife-cost, order Simonds Paper Knives from your dealer. Or write the nearest Simonds office.

SIMONDS
SAW AND STEEL CO.

FITCHBURG, MASS.

BRANCH OFFICES: 1350 Columbia Road, Boston 27, Mass.; 127 S. Green St., Chicago 7, Ill.; 416 W. Eighth St., Los Angeles 14, Calif.; 228 First St., San Francisco 5, Calif.; 311 S. W. First Ave., Portland 4, Ore.; 31 W. Trent Ave., Spokane 8, Washington; Canadian Factory: 595 St. Remi St., Montreal 30, Que.



*the NAME helps you land
the job . . .
the PAPER helps you keep
the customer!*



See the brighter white and 14 pleasing, sharply defined colors of the new Hammermill Bond. Send coupon for sample book. It's free.



**"Hammermill Bond, eh?
Now that's a paper
I know! O.K., go ahead
with the job."**

It's easier to get orders when you quote jobs on Hammermill Bond. Because here is one paper that all your customers know. For more than thirty years Hammermill Bond has been advertised to buyers of printing. The result is that today it is the best-known name in paper—the name that helps you land the job.

. . .

**"Jim, those letterheads
were fine. Here's my order
for another lot. On Ham-
mermill Bond, of course!"**

When you send out a job on Hammermill Bond, you put yourself in line for a profitable stream of re-orders. There's no secret to these extra profits! It's simply that Hammermill Bond *pleases* the customer. Just as it performs well on the press, Hammermill Bond also performs well in the customer's office. It erases neatly without scuffing. It stands up under handling. And it gives him a quality paper he can always be proud of. For profitable repeat orders, suggest Hammermill Bond.

LOOK FOR THE WATERMARK . . . IT IS HAMMERMILL'S WORD OF HONOR TO THE PUBLIC

**HAMMERMILL
BOND**

Hammermill Paper Company
1601 East Lake Road, Erie, Pennsylvania
I'd like to see the new color range and quality of Hammermill Bond.
Please send a sample book.

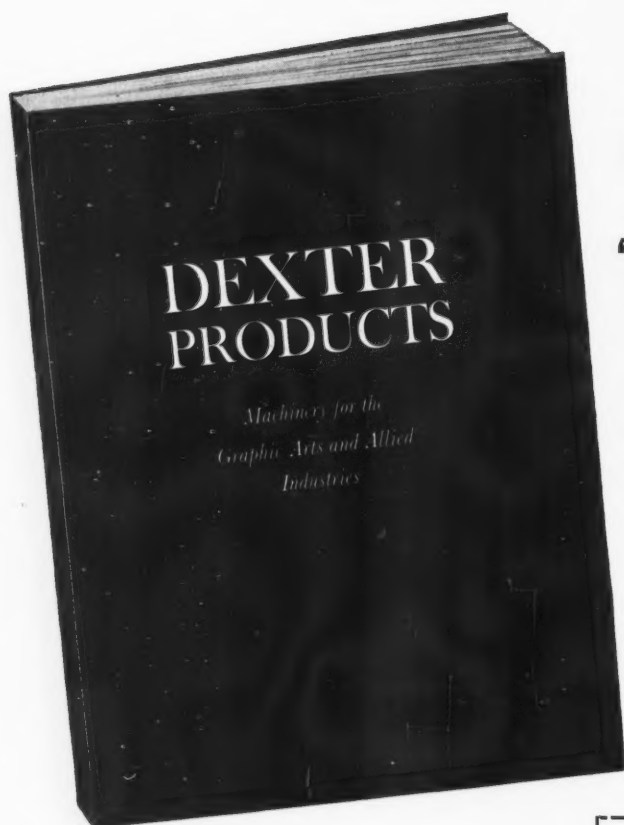
Name _____

Position _____

(Please attach to, or write on, your business letterhead)

IP-AP

Please Mention THE INLAND PRINTER When Writing to Advertisers



Ask for This Book!

"DEXTER PRODUCTS"

describes and illustrates the complete Dexter line, including equipment of our own manufacture as well as the products of

The Christensen Machine Company

Boston Wire Stitcher Company

Martin Machine Company



This COUPON is for your convenience. Check the items in which you are interested and mail—NOW!

CUT ALONG DOTTED LINE

In the Post-War Reconstruction Period many new firms and hundreds of new employees in long established Printing and Binding Companies will want to become acquainted with the newest and best equipment available for high speed economical production.

The 80 page book, "DEXTER PRODUCTS" will illustrate and describe to you and your office and plant personnel the Dexter and Christensen Press Feeders, Dexter and Cleveland Folders, Christensen and Boston Stitchers, Christensen Bronzers and Varnishers, Brackett Trimmers, Martin Gathering and Covering Machines and other types of equipment built and distributed by Dexter.

DEXTER FOLDER CO.
Pearl River • New York

DEXTER FOLDER COMPANY
Pearl River, N. Y.

Please send us your New Book
"DEXTER PRODUCTS"

We will be interested, Post-War, in the following equipment:

FOR OUR BINDERY

Quantity

-Dexter Jobbing Folder (44x58).
-Dexter Double Sixteen Folder (42x56).
-Dexter Quadruple Folder (42x56).
-Cleveland K Folder (39x52).
-Cleveland 4-Parallel (42x56).
-Cleveland MM Folder (28x44).
-Cleveland M-S Folder (25x38).
-Cleveland OO Folder (22x28).
-Cleveland O-S Folder (19x25).
-Cleveland W Folder (14x20).
-Christensen Gang Stitcher.
-Boston Book Stitcher.
-Brackett Trimmer.
-Kast Insetting Machine.
-Martin Gathering and Covering Machine.

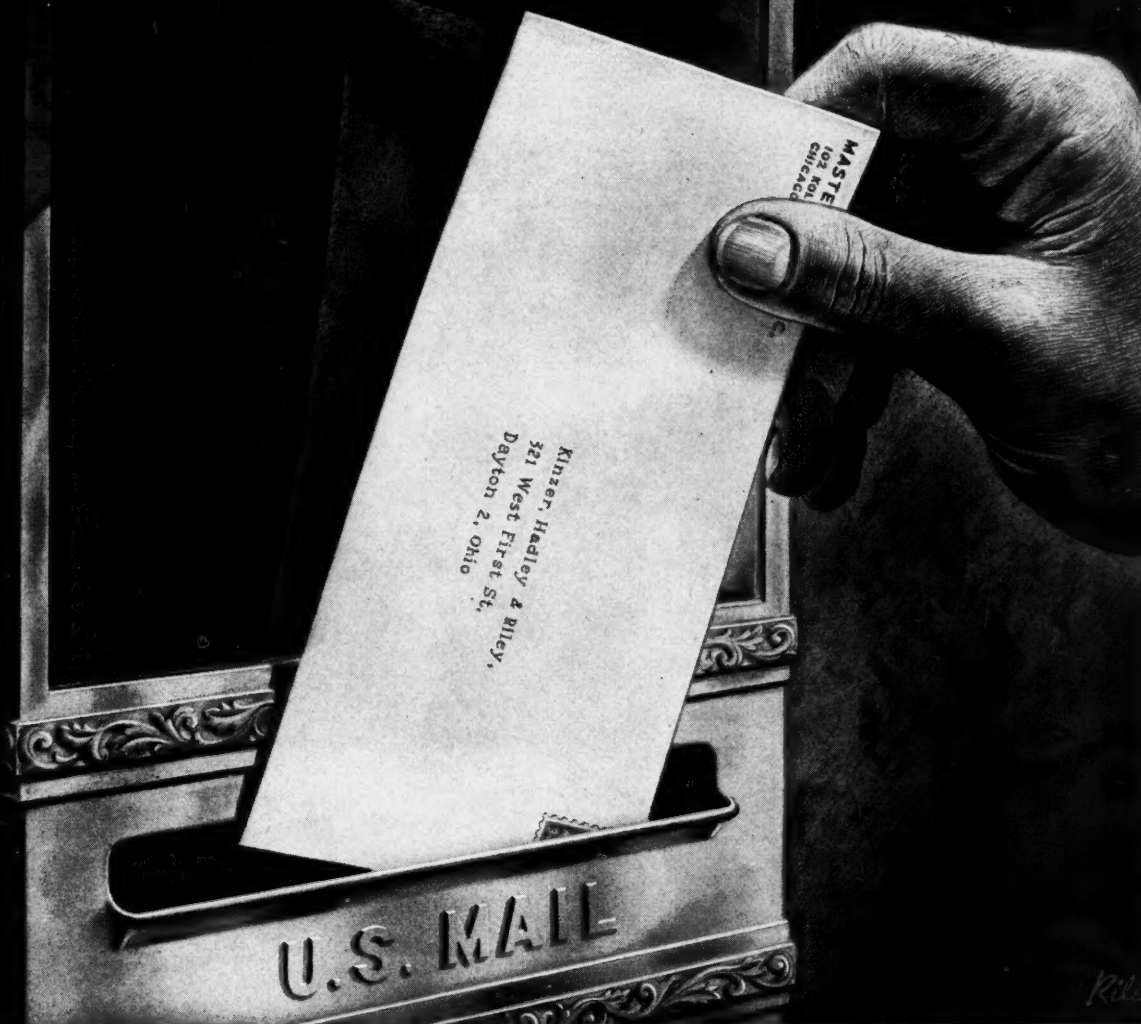
FOR OUR PRESSROOM

-Christensen Pile Press Feeder.
-Christensen Continuous Press Feeder.
-Dexter Cardboard Press Feeder.
-Christensen Bronzer.
-Christensen Varnisher.

(Dexter Press Feeders are now furnished with Miehle Presses as complete units.)

NAME

ADDRESS



Journey to...Success?

EVERY BUSINESS LETTER that you write runs into a desk-top battle royal for attention. How can you improve *your* message's chance of success in that melee of mail?

Simply endow your letters with the greatest possible advantage from the beginning—print your letterheads on *Correct Bond*. This fine rag-content bond has proved itself so compelling to sight and feel, so instantly

in command of the human respect for all things fine, that attention and consideration follow first notice without fail.

Your letterhead *deserves* distinction as only *Correct Bond* affords it. And such distinction delivers real results.

. . .

HOWARD PAPER MILLS, INC.
Aetna Paper Company Division, Dayton, Ohio

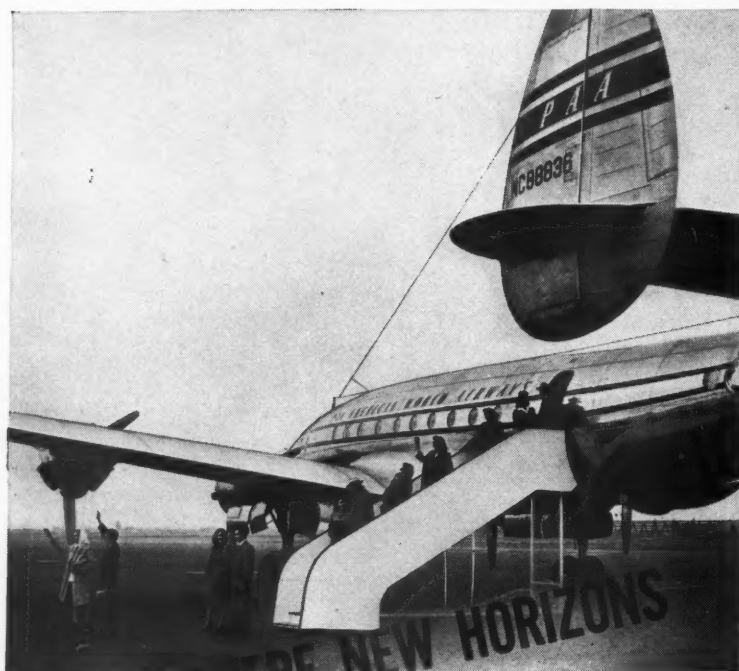
Correct Bond is an air-dried, rag-content bond of a quality instantly recognized by letterhead buyers. Its printability and appearance are such that printers use it with special satisfaction. It is on sale through leading paper merchants everywhere.



Correct Bond

Prestige in Paper

Prominent Users of Strathmore Letterhead Paper: No. 66 of a Series



ARE THERE NEW HORIZONS

FOR YOUR LETTERHEAD?

Daily departures from New York to London . . . spanning the Atlantic in 11½ hours of luxury travel. This is Pan American World Airways' schedule for their new Lockheed Constellation. One-way passage \$375 . . . opening new horizons for American businessmen and vacationers.

By flights like these Pan American World Airways proclaim their air-progress; by using a Strathmore letterhead paper they show a knowledge of the importance of creating an all-around good impression. Choose a Strathmore letterhead paper to help your company meet its new horizons confidently. The Strathmore watermark is your assurance of quality.

Strathmore Letterhead Papers: Strathmore Parchment, Strathmore Script, Strathmore Bond, Thistlemark Bond, Bay Path Bond, Alexandra Brilliant.

STRATHMORE

**MAKERS
OF FINE
PAPERS**

Strathmore Paper Company, West Springfield, Massachusetts

STRATHMORE ADVERTISEMENTS

in national magazines tell your customers about the letterheads of famous American companies on Strathmore papers. This makes it easier for you to sell these papers, which you know will produce quality results.

★ ★ ★

This series appears in:

FORTUNE

TIME

BUSINESS WEEK

UNITED STATES NEWS

NEWSWEEK

NEW YORKER

FORBES

ADVERTISING & SELLING

TIDE

PRINTERS' INK

SALES MANAGEMENT



Weatherproofed

**OUTDOOR
DISPLAYS**

**AT THE
POINT OF
PURCHASE**

IMPERVO

THE *Weatherproofing* PROCESS FOR
CARDBOARD OUTDOOR DISPLAYS

IMPERVIOUS TO
RAIN, SNOW, SUN and WIND

**OUTDOOR CARDBOARD POP* DISPLAYS
IN PICKED POSITION SPOTS**

IMPERVO is your salesman—and what a sales
booster! Gives lasting outdoor usefulness to any
cardboard display. Completely weatherproofed in-
side and outside, front, back, edges—everywhere!
Made from any regular printed sheet.

*Point of Purchase

WRITE NOW
for samples and
other information



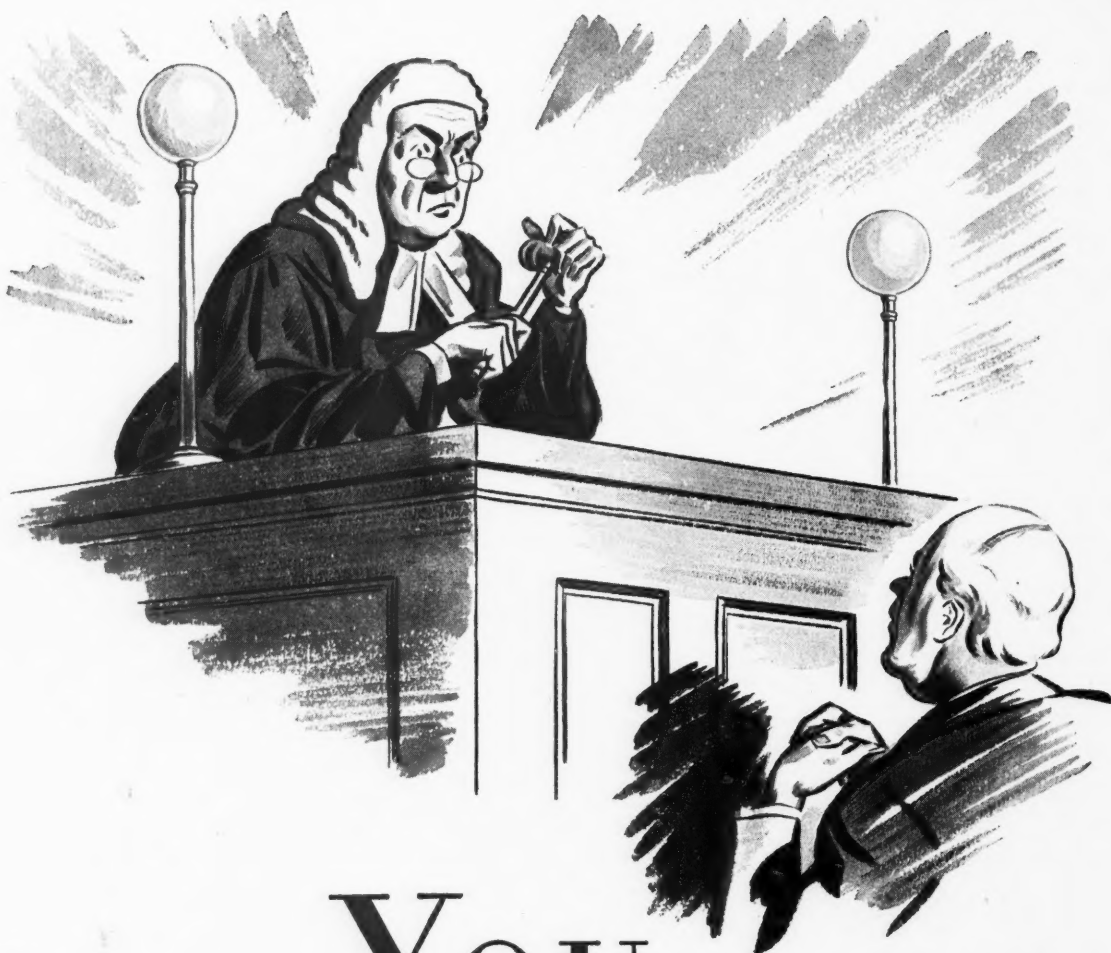
METAL
PAPERBOARD
PLASTIC

ARVEY CORPORATION

WORLD'S LARGEST MOUNTERS AND FINISHERS OF ADVERTISING DISPLAYS

CHICAGO • DETROIT • JERSEY CITY

Please Mention THE INLAND PRINTER When Writing to Advertisers



Suppose YOU were judge

You may sit on the bench and pass upon the merit of disputes between your fellow men. But if you are in the printing or advertising business you are called upon to pass judgment every day on the relative value of papers. You will want to know which paper is appropriate for the work in hand, whether it is economically or ex-

travagantly priced, how it will perform on the press, how the finished job will stand up and . . . the record and reputation of the maker. Buckeye and Beckett papers have behind them a record of nearly a century of testing in the hands of users. They have to be good, fairly priced and well served and are standard everywhere.

THE BECKETT PAPER COMPANY

Makers of Good Paper in Hamilton, Ohio, Since 1848



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1

GRAPHIC ARTS' PLATES SPOIL YOU FOR ANY OTHER

We may not like spoiled children, but we get great pleasure in spoiling lithographers and printers. More than 200 leaders of the craft like it too. Why not take the treatment?

Write, wire or phone the next time you need color process plates, black and whites, highlights, originals for hand transfer, crayon color plates, posters, line or halftone negatives or positives for machine transfer, or photo-composed press plates, albumen or deep etch for offset.

Letterpress (photo engraving) as well as complete art and photographic services are also available.

**MAIN OFFICE AND PLANT
TOLEDO 2, OHIO • JACKSON AT
11TH ST. • PHONE MAIN 2167**

CHICAGO OFFICE

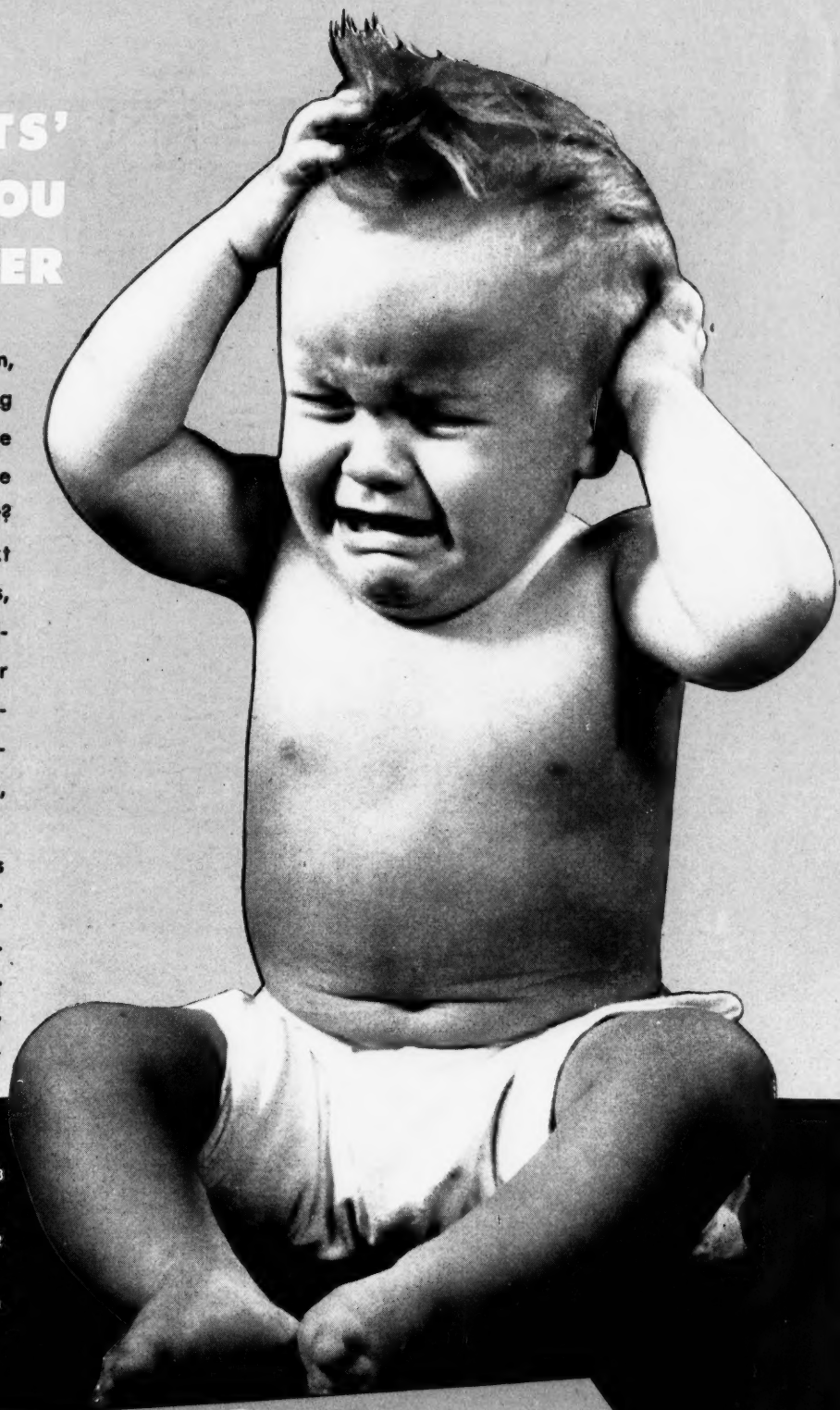
201 North Wells Street • Phone Randolph 5383

DETROIT BRANCH

Elizabeth and John R • Phone Randolph 9122

NEW YORK OFFICE

148 West 23rd Street • Phone Chelsea 3-5309



Graphic Arts Corporation of Ohio
MAKERS OF FINE PRINTING PLATES
TOLEDO • NEW YORK • CHICAGO • DETROIT

• WE DO NOT
OWN PRESSES

ANNOUNCING

4 new specific watermarks

by



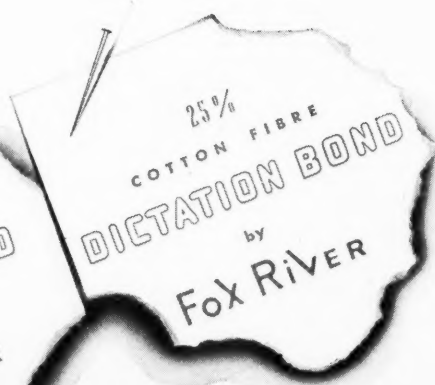
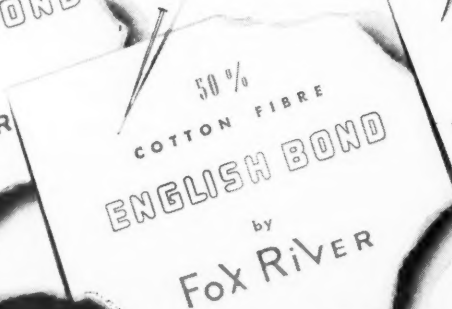
100%

COTTON FIBRE

ANNIVERSARY BOND

by

Fox River



Here's the new family of Fox River watermarks. Watermarks which reveal the actual cotton fibre content, mill identity, and the name of the paper. Watermarks that simplify your sales of fine papers for business while offering protection to the consumer. Business executives are accustomed to buying according to specifications. These watermarks will simplify their buying . . . increase your sales. What's more, you'll be able to recommend the *right* paper for letterheads and forms.

ADVERTISED TO EXECUTIVES IN

Advertising and Selling
Banking
Burrroughs Clearing House
Business Week
Direct Advertising
Dun's Review
Printers' Ink
Purchasing
Sales Management
United States News

FOX RIVER PAPER CORPORATION • 409-D S. APPLETON AVENUE • APPLETON, WISCONSIN

NOW, more than ever, the Emphasis is on

PRE-MAKEREADY

The FIRST STEP: Print from Forms Made Up of Monotype-Cast Machine- and Hand-Set Type

● The constant rise in wage rates and in the prices of the materials used in printing make it more than ever important to carefully examine the cost of production in all departments of a printing plant. The use of Monotype-cast machine-set and hand-set composition offers opportunities for substantial savings in makeready time and assure longer press-runs. Every Monotype owner knows this to be so.

Because —

The height-to-paper and the body point-size of each Monotype-cast type and piece of strip material are determined by the dimensions of the mold cell. Therefore it necessarily follows that each and every piece of type in a line will be the same exact height and point size over the entire length of the line — and that each Monotype-cast rule, dash, lead and slug will be just as precisely made. This is why forms made up of Monotype-cast type and materials cost less to makeready and to print and at the same time do printing of highest quality.

Letter #

Uniformity of letter-spacing over the entire length of the line, in both wide and narrow measures, is an advantage available only on the Monotype Typesetting Machine.

Every Printer should realize that the total cost of composition includes the time spent in making it ready to print up to his own standards of quality.

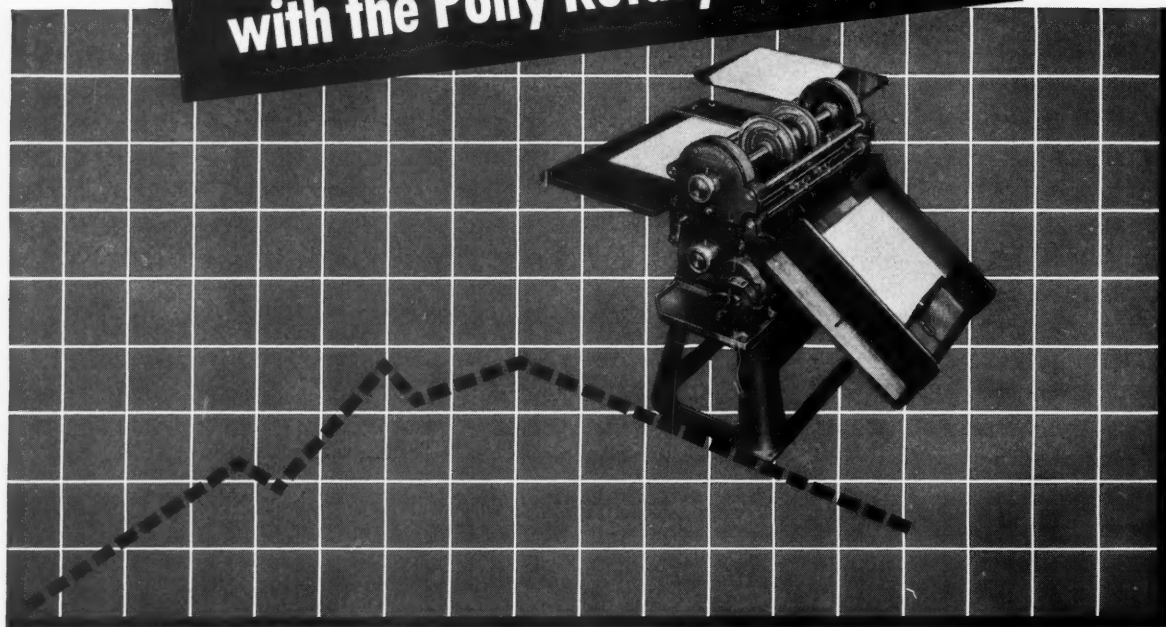
LANSTON MONOTYPE MACHINE COMPANY

MONOTYPE BUILDING, TWENTY-FOURTH AND LOCUST STREETS, PHILADELPHIA 3, PENNA.

Composed in Monotype 20th Century Family with Monotype 10 point Baskerville and Monotype Artscript

Please Mention THE INLAND PRINTER When Writing to Advertisers

Hold Down those Rising Costs with the Pony Rotary Perforator



WHEN profits are squeezed by rising costs, the Pony Rotary Perforator is one of the best-paying investments you can make. You get your money back fast, plus a quick and continuing profit, because on identical perforating jobs, using same operator, the Pony Rotary turns out the work at least two or three times as fast (on some jobs four or five times as fast) as any vertical or rotary slot machine.

On every job you use the Pony Rotary it cuts your costs one-half to two-thirds or more... gives you *extra* profits that are doubly welcome when rising costs are squeezing profits on every operation in printing plant or bindery.

And of course the Pony Rotary gives you finest quality perforating... true round hole perforations that do not weaken the sheet unnecessarily yet are easy to tear and preferred by your customers. Sheets lie flat, do not stick together... perforating can be done in full sheets before cutting and printing, the really economical way to handle many perforating jobs.

Pony Rotary Perforators are back in production once more. There are many orders on our books, but orders are being filled in rotation just as fast as we can obtain materials. To insure earliest possible delivery, place your order with your nearest Rosback dealer *today*. Or write us for latest bulletin and specifications.

F. P. ROSBACK COMPANY • Benton Harbor, Mich.



WORLD'S LARGEST MANUFACTURERS OF PERFORATORS, STITCHERS AND PAPER PUNCHING AND DRILLING MACHINES



COLOR PHOTOGRAPH BY LÉON DE VOS

"You'd be a V.P. if you wuzn't a girl!"

"THE BOSS SAID SO HIMSELF. Said these forms you thought up are cuttin' corners, cuttin' costs, and sending him home with a better disposition. He claims that keying each form with a different color is slick. Color-coordination he calls it. Next thing

you know he'll say you're pretty!"

Good business forms, well-designed and well-printed on good bond paper, *get things done*. And their efficiency can frequently be improved by printing them on HOWARD BOND. In whitest white, and in all its clear,

clean colors, HOWARD BOND is ideal for letterheads, multiple forms, and business printing of every kind.

Known as "*The Nation's Business Paper*"—specifically created for business use—HOWARD BOND meets *every* business requirement.

HOWARD PAPER MILLS, INC. • HOWARD PAPER COMPANY DIVISION, URBANA, OHIO



HOWARD BOND

"THE NATION'S BUSINESS PAPER"

DETROIT PUBLIC LIBRARY

A printer doesn't have to be a doctor...



BUT IT HELPS! Take this customer—the one with indigestion.

Among other things the front office was on his neck about paper. The same old headache—more efficiency, greater economy in forms and business letterheads. How to get *both* was driving this guy to pills.

"Put down that pill," I said. "I'll relieve that condition of yours and have the front office purring like a satisfied cat—at least as far as the

paper is concerned. Here's how:

"We put those forms and letterheads on a bond I know that's attractive yet plenty economical. It will see you through with pen, pencil or typewriter. Erases fine and gives good, clean carbons. Furthermore, this bond has a *very* respectable watermark. What do you say?"

He said "yes" and we went to work. He got the prescribed results and I got the business. The paper? . . .

You guessed it!



Maxwell Bond

HOWARD PAPER MILLS, INC.
MAXWELL PAPER COMPANY DIVISION
FRANKLIN, OHIO

America's Favorite Low-Cost Bond



**THINK OF WAGON RETAILERS
AS USERS OF**

*Offset
Lithography*



The man who handles a truck route is a fast mover. He has little time for personal selling. His boss must depend upon printed material to build sales volume.

Calendars and bottle-collars, bag stickers and window cards, garment tags and statement enclosures, direct mail and doorknob hangers—these are part and parcel of the merchandising material of *this one little sector of the business market*. They typify some of the opportunities for the shop equipped with offset.

There is wide interest in small Harris offset presses among letterpress shops. Gradually our factories are making a little headway in meeting the backlog of orders for all sizes of Harris presses, from 17 x 22" to 50 x 69", four-color. Your inquiries are invited. Do not expect early delivery. Harris-Seybold-Potter Company, General Offices, Cleveland 5, Ohio.

HARRIS • SEYBOLD

HARRIS PRESSES • SEYBOLD CUTTERS
OTHER GRAPHIC ARTS EQUIPMENT

Write today for the informative 24-page booklet on offset as it applies to the smaller establishment. Ask for "On the March."

Looking Forward to...

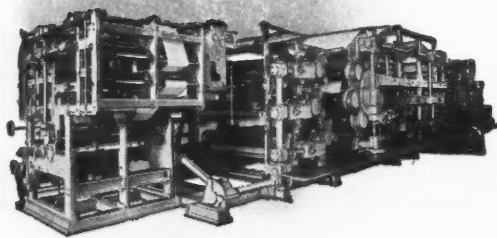


Greater

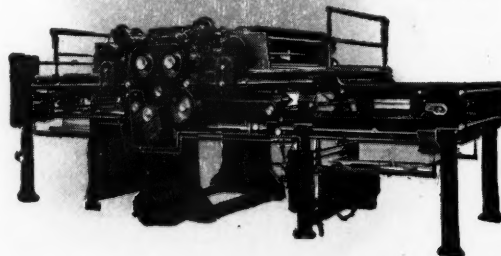
The "one world" outlook of the peoples of the globe, culturally interested in thoughts from across oceans and borders, indicates new fields for the printed word. Publishers are looking forward to great expansion of reader interest in magazines with world-wide circulations.

Better printing equipment will be required—presses that will produce multi-color covers and inside forms at high speeds; tried and proven presses.

Double five-color web press.



Two-color sheet-fed rotary press.



OVER 91 YEARS OF GROWING WITH THE GREAT PRI



Circulations

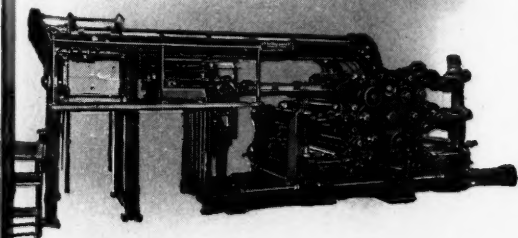
Cottrell has been producing high-speed, two to five-color presses for many of its 91 years of service to the printing industry. Cottrell looks forward with publishers and printers to the era of *Greater Volume*. With improved presses we are prepared to contribute our share to that promising future of universal reader interest.

C. B. COTTRELL & SONS CO.

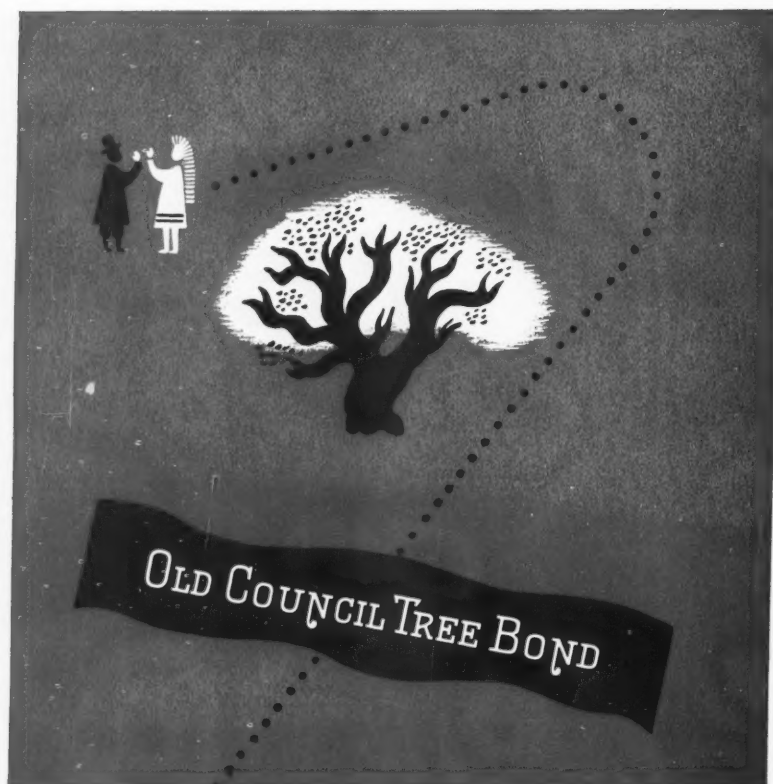
Westerly, Rhode Island

New York: 25 E. 26th St. • Chicago: Daily News Bldg.,
400 W. Madison St. • Claybourn Division: 3713 N.
Humboldt Ave., Milwaukee, Wis. • Smyth-Horne, Ltd.,
Chipstead, Surrey, England.

Five-color sheet-fed rotary press.



AT PRINTING INDUSTRY!



■ The name Old Council Tree identifies the best business and personal paper in the Neenah line. Old Council Tree Bond is made of 100% long cotton fibre stock and possesses absolute permanence. Old Council Tree Bond is ideal for business and personal needs where extraordinary distinction is required . . . and for stock and bond certificates, insurance policies and other important forms subjected to extremely severe handling.

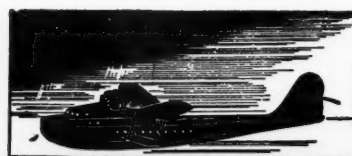
NEENAH

BETTER BOND PAPERS FOR EVERY PURPOSE

These famous names identify the papers manufactured by the Neenah Paper Company. The name *Neenah* appears in each watermark to identify the genuine for your protection.

OLD COUNCIL TREE BOND	TUDOR LEDGER
SUCCESS BOND	STONEWALL LEDGER
CHIEFTAIN BOND	RESOLUTE LEDGER
NEENAH BOND	NEENAH LEDGER
NEENAH THIN PAPERS	NEENAH INDEX BRISTOL

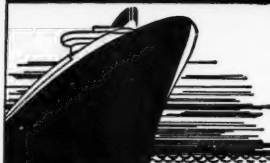
NEENAH PAPER CO. • NEENAH, WIS.



*Modern Business
demands*
THIN PAPERS

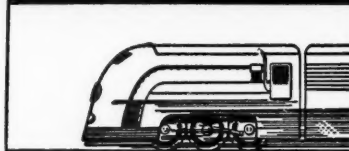
To reduce
**MAILING
TYPING
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costs.

Recommended for
Thin Letterheads, Copies,
Records, Advertising.



Specify one of
ESLEECK
THIN PAPERS

Fidelity Onion Skin
Clearcopy Onion Skin
Superior Manifold



SEND FOR SAMPLES

ESLEECK
Manufacturing Company
Turners Falls, Mass.



The Answer is **MOISTURE CONTROL**

The Chillicothe Paper Company pioneered the answer to pressmen's demand for a stock that would not be dry and brittle. After the proper amount of moisture is put in the paper on the paper machine, it is kept in by carefully controlling the humidity in the finishing room and then sealed in with heavy protecting wrapper.

Most pressmen run Chillicothe Paper without hanging. It comes off the skid and through the press without time wasting adjustment for shrink, stretch or curl.

Enamel and offset advantages are cross-bred into the truly aristocratic stock of Chillicothe Offset.

Maker of a distinctive line of fine papers for many uses, including such distinguished stocks as

LOGAN AND ADENA OFFSET AND BOOK

CHAMOIS TEXT • CHILLTINTS

GREETING CARD PAPETERIES

— ask us about them

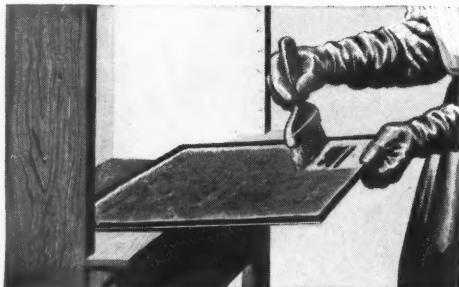
"Chillicothe Papers—  *make the best impression"*
THE CHILLICOTHE PAPER CO.
 CHILLICOTHE, OHIO

For Items Not Advertised, Write THE INLAND PRINTER'S "Readers' Service"



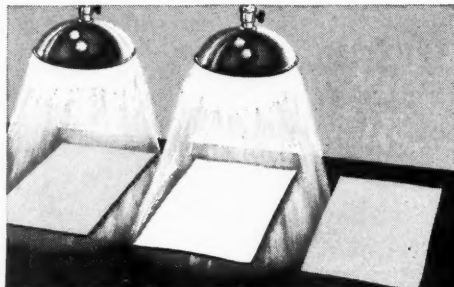
This advertisement is one of a series appearing in four colors in Fortune, Nation's Business, United States News, Newsweek and Business Week.

Test your word knowledge of Paper and Printing



1. Dragon's Blood

- ☐ Shade of red ink
- ☐ Over-dramatic copy
- ☐ Resinous powder used in etching



2. Brightness

- ☐ Reflectivity of paper for yellow light
- ☐ Degree of whiteness
- ☐ Color tints in paper



3. Broadside

- ☐ Large advertisement in folder form
- ☐ Single sheet, printed one side
- ☐ Single sheet, printed both sides



4. Trufect

- ☐ An etching process
- ☐ A type of matrix
- ☐ An ultra-quality printing paper

ANSWERS

1 Dragon's Blood, a resinous powder, protects certain areas of an etched plate while others are being etched more deeply. The subtlest values of beautiful engravings show to perfection when run on Levelcoat, considered by fine printers throughout the country to be unsurpassed in paper.

2 Brightness in paper is measured by its degree of whiteness. Brightness is a well-known characteristic of Levelcoat Printing Papers, a factor which gives halftones the contrast and vitality of life-like reproduction.

3 Broadside, though often regarded as any type of mailer, is technically a large folder which, when opened, forms one large advertisement. Lustrous Levelcoat, printed on one or both sides, makes every sheet a perfect background for color or for text.

4 Trufect is an ultra-quality Kimberly-Clark Printing Paper, the perfected result of research and 74 years of practical paper-making experience. So rich, so smooth, so clear and bright, TRUFECT provides precisely the luxurious background which helps good printing sell.

Levelcoat*

PRINTING PAPERS

For black and white or color letterpress printing in publications, mail order catalogs, house organs and direct mail, select one of these Levelcoat grades—Trufect, Multifect or Hylfect. Kimberly-Clark Corporation, Neenah, Wis.

A PRODUCT OF
**Kimberly
Clark**
RESEARCH

*TRADE MARK

SAM'L BINGHAM'S SON MFG. CO.

MANUFACTURERS OF

**PRINTERS' ROLLERS
LITHO-OFFSET ROLLERS**

**RUBBER
NON-MELTABLE
FABRIC-COVERED
ROTOGRAVURE**

ROLLERS

**OFFSET
COMPOSITION
VARNISH & LACQUER
GRAINING**

PRINTERS ROLLERS

COMPOSITION; SYNTHETIC RUBBER;
NATURAL RUBBER; VULCANIZED OIL

FOR EVERY PRINTING PURPOSE



**IT'S NOW TIME TO GET YOUR ROLLERS READY
FOR SUMMER USE**

**SHIP YOUR OLD ROLLERS
TO FACTORY MOST CONVENIENT TO YOU**

FACTORIES

ATLANTA 3
CHICAGO 5
CLEVELAND 14
DALLAS 1

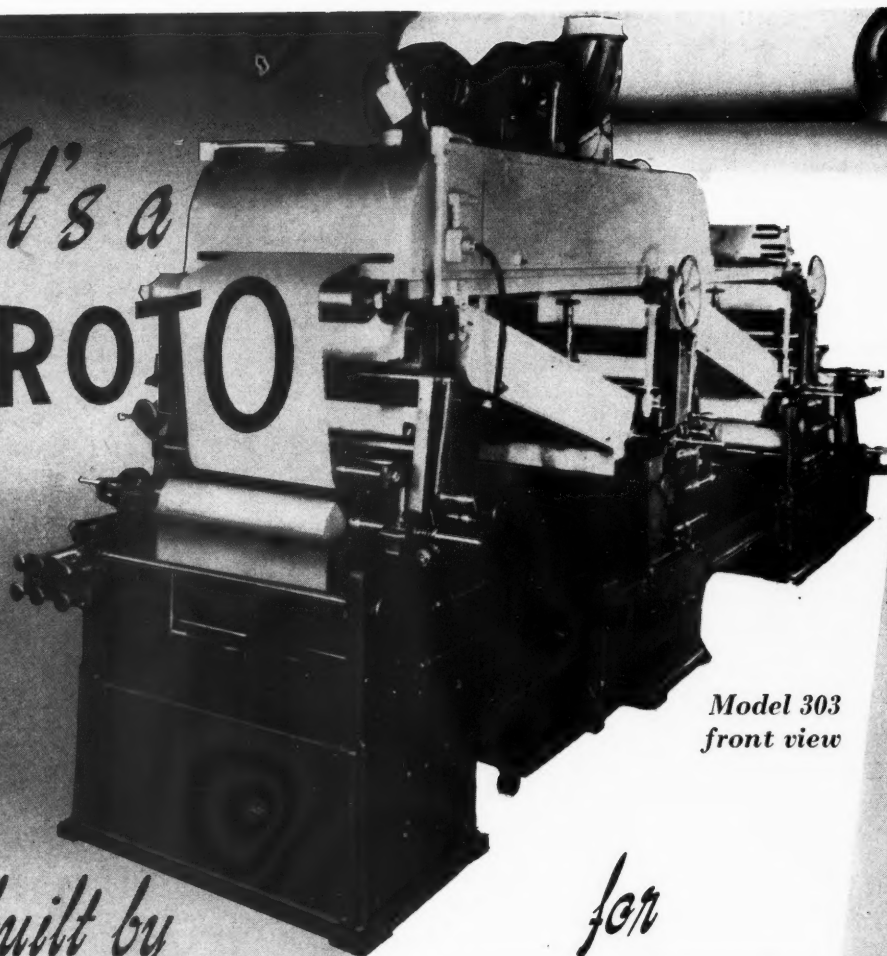
DES MOINES 2
DETROIT 10
HOUSTON 6
INDIANAPOLIS 2

KALAMAZOO 12
KANSAS CITY 6
MINNEAPOLIS 15
NASHVILLE 3

OKLAHOMA CITY 6
PITTSBURGH 3
ST. LOUIS 2
SPRINGFIELD, O.

Roller Makers since 1847

It's a
HYROTO



*Model 303
front view*

built by
**ROTOGRAVURE
ENGINEERING CO.**

*A Subsidiary of
Miller Printing Machinery Co.*

**7614 EMPIRE STATE BLDG.
NEW YORK**

for
**COATING • PRINTING
and LAMINATING
Paper and
Card Stocks
Foil • Glassine
Plastic Films
and Sheetings
Kraft • Tissues**

The beaver is industrious
He goes to work without a fuss
Stays with the job until it's done
Goes looking for another one.



ATLANTIC BOND IS AN EAGER BEAVER

When you want a job well done... a job that will please both you and your customer... do it on Atlantic Bond.

For letterheads, envelopes or business forms, this clean, crisp, genuinely watermarked bond has all the ear-marks of fine distinctive quality.

More than that, Atlantic Bond is a good steady worker on a press. It has those important characteristics that lead to better results... firm, uniform surfaces; precision trimmed edges; and proper moisture content.

Send for our portfolio of Eastern Fine Papers for Printers.

Atlantic Bond
MADE BY
EASTERN CORPORATION
BANGOR, MAINE

EASTERN MILL BRAND LINES

ATLANTIC BOND ATLANTIC ANTIQUE LAID
ATLANTIC LEDGER ATLANTIC MIMEO BOND
ATLANTIC DUPLICATOR ATLANTIC MANIFOLD
ATLANTIC COVER ATLANTIC MANUSCRIPT COVER
ATLANTIC VELLUM ATLANTIC DUROPAKE
 ATLANTIC LETTERHEAD BOX
 ATLANTIC BOND ENVELOPES
ATLANTIC BOND CABINET STATIONERY
ATLANTIC BOXED TYPEWRITER PAPER

A complete line of dependable, standardized business papers

VOLUME BOND VOLUME BOND ENVELOPES
An inexpensive, dependable watermarked
Eastern Mill Brand Paper

MANIFEST BOND MANIFEST MIMEO BOND
MANIFEST LEDGER MANIFEST DUPLICATOR
MANIFEST BOND ENVELOPES

The leading Mill Brand Line in the Economy Group

The above Brand names are registered trademarks

EASTERN MILL BRAND MERCHANTS



Akron.....The Millcraft Paper Co.
Albany.....W. H. Smith Paper Corp.
Alexandria, La.....Louisiana Paper Co.
Atlanta.....Sloan Paper Co.
Baltimore {Baltimore Paper Co.
 Henry D. Mentzel & Co.
 The Mudge Paper Co.
Baton Rouge.....Louisiana Paper Co.
Birmingham.....Sloan Paper Co.
Boston {John Carter & Co.
 Century Paper Co.
 Cook-Vivian Company
 Von Olker-Snell Paper Co.
Bridgeport.....Lott-Merlin, Inc.
Bristol, Va.....Dillard Paper Co.
Buffalo.....Franklin-Cowan Paper Co.
Charlotte, N. C.....Dillard Paper Co.
Chattanooga, Tenn.....Bond-Sanders Paper Co.
Chicago {Birmingham & Prosser Co.
 La Salle Paper Company
 Reliable Paper Co.
Cincinnati.....The Johnston Paper Co.
Cleveland.....The Millcraft Paper Co.
Columbus.....Sterling Paper Co.
Dallas.....Olmsted-Kirk Company
Denver.....Dixon & Company
Des Moines.....Pratt Paper Company
Detroit.....Chope-Stevens Paper Co.
Fort Wayne.....The Millcraft Paper Co.
Fort Worth.....Olmsted-Kirk Company
Greensboro, N. C.....Dillard Paper Co.
Greenville, S. C.....Dillard Paper Co.
Hartford {John Carter & Co.
 Henry Lindenmeyr & Sons
Houston.....L. S. Bosworth Co.
Indianapolis {Indiana Paper Company
 MacCollum Paper Company
Jackson, Miss.....Townsend Paper Co.
Jacksonville, Fla.....Jacksonville Paper Co.
Jamestown, N. Y.....The Millcraft Paper Co.
Kansas City.....Birmingham & Prosser Co.
Little Rock.....Arkansas Paper Company
Los Angeles.....Carpenter Paper Co.
Louisville.....The Rowland Paper Co.
Macon, Ga.....Macon Paper Company
Manchester, N. H.....C. H. Robinson Co.
Miami.....Everglade Paper Company
Milwaukee.....Wisconsin Paper & Products Co.
Minneapolis.....Stillwell-Minneapolis, Division
 Carpenter Paper Co.
Mobile, Ala.....Partin Paper Co.
Monroe, La.....Louisiana Paper Company
Muskogee.....Muskogee Paper Co.

Nashville.....Bond-Sanders Paper Co.
Newark.....Central Paper Co.
New Haven...Whitney-Anderson Paper Co.
New Orleans.....Alco Paper Co., Inc.
 Berman Paper Corp.
 Forest Paper Company
New York {Majestic Paper Corp.
 Milton Paper Co.
 A. W. Pohlman Paper Co.
Oakland.....Carpenter Paper Co.
Omaha.....Field Paper Co.
Orlando, Fla.....Central Paper Co.
Philadelphia {Molten Paper Company
 The J. L. N. Smythe Co.
Pittsburgh.....General Paper and Cordage Co.
Portland, Me.....C. H. Robinson Co.
Portland, Ore.....Carter, Rice & Co. of Oregon
Providence, R. I.....Narragansett Paper Co.
Richmond.....Virginia Paper Co.
Roanoke, Va.....Dillard Paper Co.
Rochester.....Genesee Valley Paper Co.
St. Louis.....Shaughnessy-Kniep-Hawe Paper Co.
St. Paul.....E. J. Stillwell, Division
 Carpenter Paper Co.
San Antonio.....Shiner-Sien Paper Co.
San Diego.....Carpenter Paper Co.
San Francisco.....Carpenter Paper Co.
Savannah.....Atlantic Paper Company
Seattle.....Carter, Rice & Co. of Washington
Shreveport.....Louisiana Paper Co.
Springfield, Mass.....Whitney-Anderson Paper Co.
Stamford, Conn.....Lott-Merlin, Inc.
Tallahassee.....Capital Paper Co.
Tampa.....Tampa Paper Co.
Texarkana, Ark.....Louisiana Paper Co.
Toledo.....The Millcraft Paper Co.
Trenton.....Central Paper Co.
Tulsa.....Tulsa Paper Company
Waco, Texas.....Olmsted-Kirk Company
Washington, D. C.....Virginia Paper Company
Wichita.....Southwest Paper Co.
Worcester.....Butler-Dearden Paper Service
York, Pa.....The Mudge Paper Co.

Monterrey, N. L., Mexico.....Carpenter Paper Co.

MANIFEST BOND ONLY is also sold in New York City by
Henry Lindenmeyr & Sons, Merriam Paper Co. and George
W. Millar & Co., Inc.

Get maximum results from your
NEW presses. Be sure to specify
Daycos on ALL new equipment.

If mermaids ran a print shop...

THEY WOULD INSIST ON Dayco Rollers
because tests prove that Daycos are unaffected by
water. You can drop a Dayco Roller to the floor of the sea,
leave it there for days, fish it up, put it on a press and start to
roll! ¶ You can put a Dayco Roller in a chamber filled with
live steam, freeze it in a cake of ice, put it into a vat of oil, or
varnish or dye . . . and it will come out as good as the
day you put it in. ¶ Daycos take solids, fine screen half-
tones and every kind of ink made. Press speeds have no ad-
verse effects on their fine printing qualities. They outwear other
rollers four to one. Your present metal stock can be easily and
quickly covered. Write for complete information today.

THE DAYTON RUBBER MANUFACTURING COMPANY
DAYTON 1, OHIO

Latin American Representatives: National Paper and Type Company, 120 Wall
Street, New York, N. Y. Canadian Representatives: Manton Brothers Ltd.,
Toronto-Winnipeg-Montreal-Vancouver

DAYCO ROLLERS BY

Dayton Rubber

THE MARK OF TECHNICAL EXCELLENCE IN NATURAL AND SYNTHETIC RUBBER

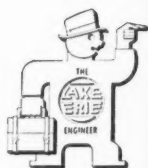
MANUFACTURERS OF THE WORLD'S FINEST PRINTING ROLLERS



For Items Not Advertised, Write THE INLAND PRINTER'S "Readers' Service"

ACRAPLATE

CUTS PRINTING COSTS



Illustrated is the Model 10 Acraplate with 20" x 16" platens. Acraplates are available in a complete range of sizes to meet the needs of every plant—large or small.



The use of rubber plates made with the Acraplate lowers costs in these specific ways...

- Eliminates the profitless investment and costly storage of standing forms. Resinous matrices can be stored indefinitely in 1/4 the space of metal, and weigh only about 1/30 as much.
- Permits many more jobs to be run in multiple with resultant savings in press time.
- Yields definite savings in ink and make-ready costs.
- Sheets lie flat after printing due to extremely light impression and elimination of embossing, thereby speeding up gathering and jogging.



Any one of these savings is well worthwhile. Acraplate brings you all of them plus many others. Over one hundred Acraplates are doing it every day for progressive plants throughout the United States and Canada.

It will pay you to get complete facts about the Acraplate. It will pay you to do it today. Write now to Lake Erie.

LAKE ERIE
ENGINEERING CORPORATION
504 Woodward Avenue
Buffalo 17, N. Y.

Offices in Principal Cities and Foreign Countries

- Leading manufacturer of hydraulic presses...all sizes and types...stereotyping...plastic molding...processing rubber vulcanizing...metal working...special purpose.

MEAD
papers

NATIONALLY-DISTRIBUTED

ALA.: Partin Paper Co.; Sloan Paper Co.
ARIZ.: Blake, Moffitt & Towne; Zellerbach.
ARK.: Roach Paper Co.
CAL.: Blake, Moffitt & Towne; Commercial Paper Corp.; General Paper Co.; Zellerbach.
COLO.: Dixon & Co.
CONN.: Rourke-Eno Paper Co.; John Carter & Co.
D. of C.: R. P. Andrews; Barton, Duer & Koch; Stanford.
FLA.: Capital Paper Co.; Central Paper Co.; Everglade Paper Co.; Jacksonville Paper Co.; Tampa Paper Co.
GA.: Atlantic Paper Co.; Graham Paper Co.; Macon Paper Co.; Sloan Paper Co.
IDA.: Blake, Moffitt & Towne; Zellerbach.
ILL.: Berkshire Paper Co.; Birmingham & Prosser; Blunden-Lyon Paper Co.; Chicago Paper Co.; Dwight Bros. Paper Co.; LaSalle Paper Co.; Marquette Paper Corp.; Messinger Paper Co.; Midland Paper Co.; Swigart Paper Co.; James White.
IND.: Central Ohio; Century Paper Co.; Diem & Wing; C. P. Lesh; Crescent Paper Co.
IOWA: Carpenter Paper Co.
KAN.: Carpenter Paper Co.
KY.: Louisville Paper Co.
LA.: Alco Paper Co.
ME.: Arnold-Roberts; C. H. Robinson.
MD.: Antietam Paper Co.; Barton, Duer & Koch; Baxter Paper Co.; O. F. H. Warner & Co.
MASS.: Arnold-Roberts; Butler-Dearden; Carter, Rice & Co.; John Carter & Co.; Century Paper Co.; Cook-Vivian; Paper House of N. E.; Storrs & Bement Co.; Whitney-Anderson.
MICH.: Beecher, Peck & Lewis; Birmingham & Prosser; Carpenter Paper Co.; Grand Rapids Paper Co.; Seaman-Patrick; Union Paper & Twine.
MINN.: John Boshart; General Paper Corp.; The John Leslie Paper Co.
MO.: Acme Paper Co.; Birmingham & Prosser; Central States Paper Co.; K. C. Paper House; Tobey Fine Papers, Inc.; Weber Paper Co.; Zellerbach.
MONT.: Carpenter Paper Co.; The John Leslie Paper Co.
NEB.: Carpenter Paper Co.
N.J.: Bulkley, Dunton & Co.; Lathrop Paper Co.; Lewmar Paper Co.; J. E. Linde; Henry Lindenmeyr & Sons.
NEW YORK CITY: H. P. Andrews; Beekman Paper & Card Co.; Bulkley, Dunton & Co.; Canfield Paper Co.; M. M. Elish & Co., Inc.; Forest Paper Co.; Green & Low; Lathrop Paper Co.; J. E. Linde; Henry Lindenmeyr & Sons; Marquardt & Co.; Merriam Paper Co.; Miller & Wright; A. W. Pohlman; Reinhold-Gould, Inc.; Schlosser Paper Corp.; Vernon Bros. & Co.; Walker-Goulard-Plehn; Willmann Paper Co.
NEW YORK: Fine Papers Inc.; Franklin-Cowan; J. & F. B. Garrett; W. H. Smith.
N. C.: Dillard Paper Co.
OHIO: Alling & Cory Co.; Central Ohio; Chatfield Paper Corp.; Cleveland Paper Co.; Diem & Wing; The Johnston Paper Co.; Ohio & Michigan Paper Co.; Scioto Paper Co.; Union Paper & Twine Co.
OKLA.: Carpenter Paper Co.; Tulsa Paper Co.
ORE.: Carter, Rice & Co. of Ore.; Fraser; Zellerbach.
PA.: Alling & Cory Co.; Chatfield & Woods; A. Hartung & Co.; Johnston, Keffer & Trout; Thos. W. Price Co.; Raymond & McNutt Co.; G. A. Rinn; Schuykill Paper Co.; Whiting-Patterson Co.; Wilcox-Walter-Furlong; H. A. Whiteman & Co.
R. I.: John Carter & Co.; Narragansett Paper Co.
S. C.: Dillard Paper Co.
TENN.: Bond-Sanders Paper Co.; Clements Paper Co.; Sloan Paper Co.; Southern Paper Co.
TEX.: L. S. Bosworth Co., Inc.; Carpenter Paper Co.; C. & G. Paper House; Clappitt Paper Co.
UTAH: Carpenter Paper Co.; Zellerbach.
VA.: Old Dominion Paper Co.; Cauthorne Paper Co.; Richmond Paper Co.; Dillard Paper Co.
WASH.: Blake, Moffitt & Towne; Carter, Rice & Co. of Wash.; Zellerbach.
WIS.: Bower Paper Co.; Wisconsin Paper & Products Co.; Woelz Bros.



YOU CAN'T SELL SITTING DOWN

Electrical equipment manufacturers confidently anticipate sales of five billion dollars a year . . . or three times pre-war production.

But annual sales, like production, don't just happen, despite pent-up demands and liquid savings of 150 billions . . . and order-taking can never expect to face as secure a future as salesmanship.

That is why this Corporation — "Paper Makers to America" — has launched an expansion program consistent with its size, and why research is tireless in the development of ever better printing surfaces for ever better impressions.

Demand for Mead Papers, including the Mead, Dill & Collins, and Wheelwright lines, is evidence enough of the fact that record-breaking sales-expectations in all business fields are not to be realized sitting down. America knows that goods must be sold even to a public impatient to buy.

★★★ Mead offers a completely diversified line of papers in colors, substances, and surfaces for every printed use, including such famous grades as Mead Bond; Moistrite Bond and Offset; Process Plate; Wheelwright Bristols and Indexes; D & C Black & White; Printflex; Canterbury Text; and De & Se Tints.



ESTABLISHED 1946

1846 • ONE HUNDRED YEARS OF PAPER MAKING • 1946

THE MEAD CORPORATION • "PAPER MAKERS TO AMERICA"

THE MEAD SALES COMPANY, 230 PARK AVENUE, NEW YORK 17 • SALES OFFICES: MEAD, DILL & COLLINS, AND WHEELWRIGHT PAPERS • PHILADELPHIA • BOSTON • CHICAGO • DAYTON

When Writing to Advertisers Please Mention THE INLAND PRINTER



Friends **OR ENEMIES?**

How will they go together, printer's paper and engraver's plate? Will their meeting produce happy results, or will paper and ink refuse to blend properly?

The truth is, there's no way to tell till the meeting takes place! That's why Bryant is turning to research as a means of pretesting papers, proving them in advance on actual press runs. To speed their development, Bryant will soon have use of the new Graphic Arts Laboratory, now nearing completion, as a center of paper research. Here paper will be made to divulge all its secrets. Not just "How strong is it?" or "How finely textured?" but "How does it react to various inks?" and "How does it stand up on the press?"

Knowing the answers to these questions, Bryant will be able to assure you papers of Measured Quality, papers proved in advance to give better printing results.

Sold Through Leading Paper Merchants

BRYANT PAPER COMPANY

Kalamazoo 29F, Michigan

Rodin's chiseled name...



A RODIN

Rodin's signature, famous in his chosen field, was graven in imperishable marble.

EAGLE-A



PAPERS

This famous watermark in Eagle-A Papers is your guarantee of value.

symbol of a titan in sculpture

By sheer force of originality, Auguste Rodin assailed classical concepts of sculpture and his bold pioneering created a vital school of art. Rodin's name, chiseled in an *object d'art* is synonymous with genius and recognized leadership. His handling of values, in marble produced unrivalled texture and composition which acclaimed him as preeminently "The Master" by his contemporaries.

EAGLE-A AGAWAM BOND

with its famous Eagle-A watermark—combines 100% new cotton fibre with outstanding papermaking skill to produce a quality paper of a texture and composition that has won

acclaim and leadership with buyers of paper for business and legal use.

Quality in business stationery is an asset—it impresses your customer, client or prospect—builds prestige and goodwill and acts as your silent salesman at all times.

Recommend Eagle-A Agawam Bond to your customers. Samples are always available from your Eagle-A Paper Merchant.

*Eagle-A Agawam Bond is also available in
EAGLE-A TYPEWRITER AND BOXED PAPER*

EAGLE-A PAPERS

AMERICAN WRITING PAPER CORPORATION • HOLYOKE MASSACHUSETTS

Please Mention THE INLAND PRINTER When Writing to Advertisers

33



The old adage that one cannot serve two masters was long ago exploded in the case of Northwest Pedigreed Papers. Behind us are many decades of top-quality production for a multiplicity of masters—printers, lithographers and paper users. In their needs, we heard the call to arms,—in their fulfillment we but executed the royal commands. Throughout the years, this close cooperation between maker-producer-user has resulted in superior printing papers famous for their plus service *beyond the call of duty.*



*Mountie Offset • Mountie Book • Klo-Kay Book
Klo-Kay Bond • Carlton Bond • Carlton Ledger
Klo-Kay Index Bristol • Klo-Kay Cream Post
Card • Klo-Kay Mimeo-Bond • Carlton Mimeo-
graph • North Star Writing • Mountie Label
Carlton Duplicator • Envelope Papers • Papeteries
Converting Index • Drawing • Adding Machine
Lining • Coating Raw Stock • Cup Paper*

**THE NORTHWEST
PAPER COMPANY
CLOQUET • MINNESOTA**

sleepless midnights —*not now!*

A well-known production manager recently gave us a remarkably convincing statement concerning his business experience. Listen!

“Since my battery of *Blue Streaks* has been completed, I don’t wake up nights worrying about those old numbers that had been doing war duty on borrowed time. Now, they’re gone—I’m 100% *Blue Streak*.”

We rate this endorsement highly, since it is typical of the experience of many executives. Does it fit your case? Have you discussed *your* composing-room problems with your Linotype Production Engineer? It will pay you to do so.

BROOKLYN

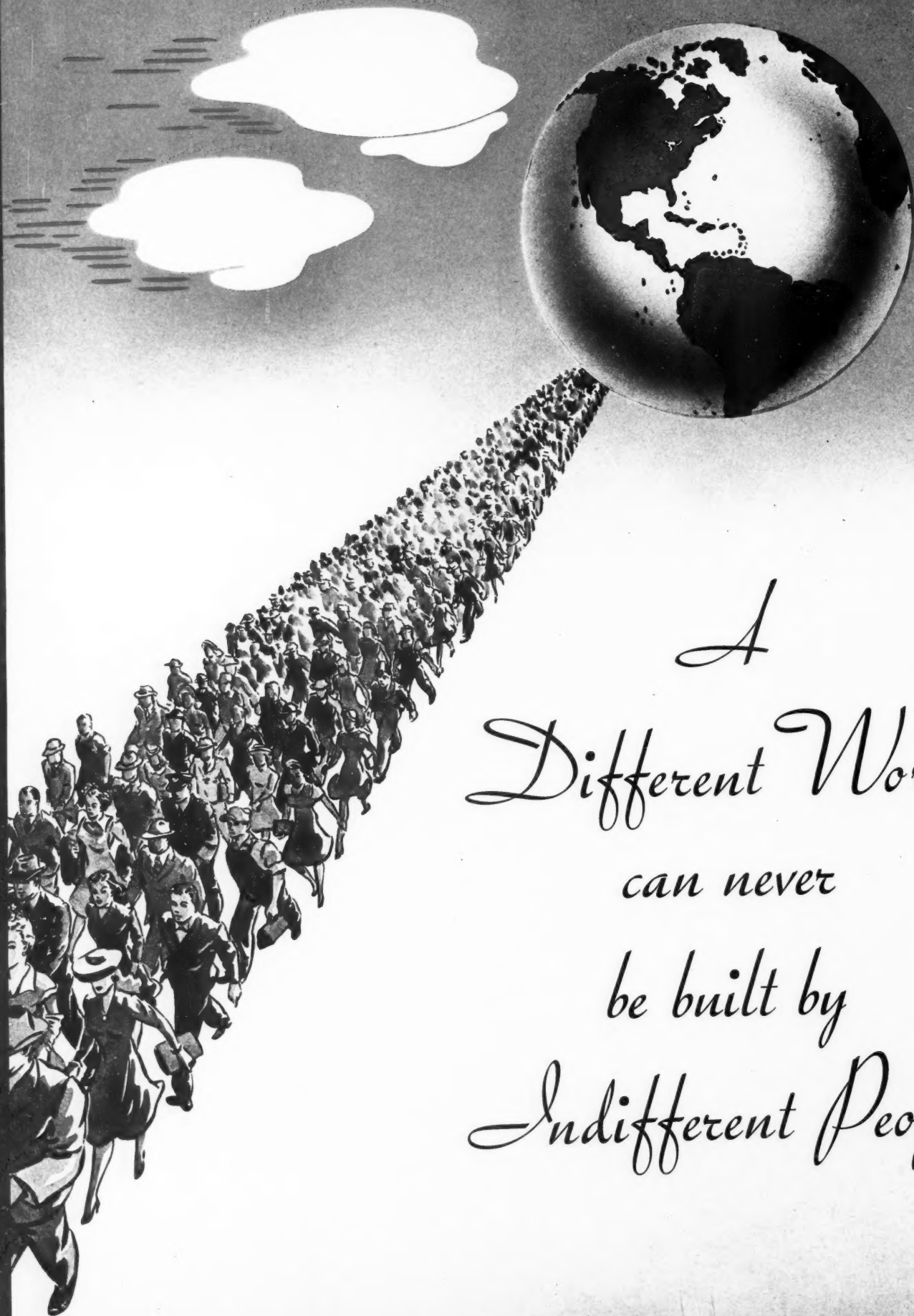


NEW YORK

NEW YORK CITY, 500 Fifth Avenue BOSTON, Park Square Building CHICAGO, 531 Plymouth Court
NEW ORLEANS, 549 Baronne Street SAN FRANCISCO, 638 Sacramento Street LOS ANGELES, 1515 Georgia
Street CANADIAN LINOTYPE, LIMITED, Toronto, 119 Adelaide Street W.

Linotype Caston Old Face Series

For Items Not Advertised, Write THE INLAND PRINTER'S "Readers' Service"



*A
Different World
can never
be built by
Indifferent People*

The Inland Printer

THE WORLD'S LEADING BUSINESS AND TECHNICAL JOURNAL IN
THE PRINTING AND ALLIED INDUSTRIES *J. L. Frazier, Editor*
MACLEAN-HUNTER PUBLISHING CORPORATION • APRIL • 1946

Bottlenecks in the Paper Industry Make Prospects None Too Bright

● THE PAPER SUPPLY situation is very black at present, as every printer knows, and is not likely to improve much this year, judging from all the discouraging statistics presented at the annual convention of paper manufacturers held last month in New York City. Three bottlenecks are preventing supply from meeting an increasing demand: shortage of pulp, shortage of papermaking facilities, and price ceilings on pulp and paper. Of the three, the pulp shortage is the most serious from the short-range view, with price ceilings a contributing factor in the insufficient supply of this raw material.

The paper industry made 17,370,000 tons of paper and paperboard last year, about half of which was paper, and during the last quarter of the year was producing at the rate of 18,000,000 tons a year, but the total supply of new pulp probably will not be sufficient to sustain production at this rate in 1946, it was brought out at the convention. One authority estimates that the demand for pulp exceeds the supply by 10 per cent, and that there will be a shortage of 1,000,000 tons of pulp in 1946. In terms of paper and board this would mean manufacture of anywhere from 1,700,000 to 3,000,000 tons, varying according to the kinds of paper and board made and their pulp content.

Hardest blow to the industry is the threatened loss of 700,000 tons of pulp from Sweden, unless price ceilings are raised to attract it. Last year Sweden shipped 671,000 tons here. An effort to get a price increase on pulp was initiated at the convention by the Association of

Three bottlenecks are preventing paper supply from meeting an increasing demand:

- Shortage of pulp.
- Shortage of papermaking facilities.
- Price ceilings on pulp and paper.

By *Glenn C. Compton*
NEW YORK EDITOR

Pulp Consumers, which suggested requesting the Civilian Production Administration to investigate the "adequacy" of pulp and certify its findings to the OPA. Canada, which is supplying this country with twice as much pulp as it did before the war, will not be able to furnish us any more this year than last.

Efforts to increase the volume of pulpwood in this country are being made by the newly organized United States Pulpwood Council headed by James L. Madden of Boston, who during the war served as chief of the pulpwood production division of the WPB Forest Products Bureau. This council plans a drive to secure 100,000 new workers in the forests and in paper mills, and will also encourage farmers to produce more pulpwood on their own and neighboring woodlands. During the convention a group of former Sea Bees offered to organize lumber camps and apply war-learned mechanized

techniques to cutting of wood. Machinery for wood-cutting or more men will be needed to replace the 17,000 prisoners of war who will soon be returned to Europe.

There will be a slight increase in the total productive capacity of the paper industry during 1946, through the installation of new machinery and the rebuilding of existing machinery. This will give some relief, provided the pulp can be obtained to keep the machines busy. Paper-making capacity, exclusive of the paperboard, will be increased by an estimated 651,000 tons. Of this amount, only 229,000 tons will be book paper, 35,000 groundwood, and 74,000 writing. Most of the rest will be specialty and non-printing papers. Expanding mill capacity is a very slow process—it takes fifteen months at the present time to build a paper-making machine.

D. K. Brown of the Neenah Paper Company, in his annual report as retiring president of the American Paper & Pulp Association, noted the very limited increase in paper production that can be expected this year when he said that "while the increased capacity of individual companies may be fairly large, yet the over-all increase is only a small percentage of present production in any one group, probably not more than the growth of our population during the war period."

The removal of controls on the manufacture and use of paper has aggravated the situation. It is evident now that these controls were lifted too soon, at least as far as the small buyer of paper is concerned. A year or so ago paper was considered the most critical of all

materials and it was assumed that the restrictions on paper would and should be the last to go, but they were swept away in the stampede to get rid of all wartime controls. There were warnings then of what would happen—a rush of big buyers to capture the entire supply, with the little fellow squeezed out of the market. Now it's happening.

The most alarming development in this direction is the purchase or control of paper mills by the large users, principally by magazine publishers. They are devoting the entire productive capacity of these mills to their own purposes to the exclusion of the needs of printers and other users.

Mills which formerly helped supply the advertising and publication printers have thus been taken away from them as sources of supply. The paper merchants who depended upon these mills frankly tell their customers that these sources have dried up and that no others are available. It is estimated that at least 6 per cent of the country's total paper production has been taken off the open market by these "captive" mills. Of the 1,800,000 tons of book paper consumed by the printing and publishing industry, publishers normally take about 40 per cent; they are now seeking 80 per cent, according to one estimate. Among magazine publishers who have recently figured in deals with mills are Time, Curtis, McGraw-Hill, Crowell-Collier, and Hearst.

In its nationwide spot survey made in February, the Printing Industry of America learned that commercial printers are obtaining only about the same amount of paper they received under the old WPB Order L-241, which was 75 per cent of 1941 usage. The most severe shortage is in coated, with machine-finish, offset, bristol, and kraft following in that order.

The coated paper situation is an "island" of shortage within the over-all paper shortage. Two factors are involved here—the trend to machine-coated and price ceilings. Because the production of machine-coated and its consumption, chiefly by large magazines, have increased by leaps and bounds, the brush-coated manufacturers are discouraged. One of the leading manufacturers of brush-coated, for example, has scrapped half his production of this kind of paper. There has been a sharp drop in production of brush-coated, from 321,000 tons in 1937 to an average of 220,000 tons a year from 1943 to 1945, a decrease of nearly one-third.

Under present price ceilings, mills find it unprofitable to make brush-coated paper because of the extra operation involved. Consequently they are diverting their base pulp stock to uncoated paper. There is another saving here, because uncoated does not have to be cased in the same manner as coated.

The diversion to uncoated paper is especially marked in the integrated mills which make their own pulp and thus can control what happens to it, turning it into the kinds of paper which yield the most profit at the moment.

The non-integrated or converting mills which make coated paper have been cut off from a large portion of their supply of pulp through the purchase or control of mills by magazine publishers, who are taking the entire pulp production of integrated mills, leaving no surplus to sell.

C. P. A. Controls Unlikely

Another result of the lifting of controls is what some consider a premature return to the heavier weights of paper and to the larger prewar sizes of magazines. The National Publishers Association, in a survey of 723 publications, reported that of 642 which had reduced their paper usage during the war, 169 have already increased their paper demands since controls were lifted, 89 plan to do so soon, and 296 said they would "as soon as possible."

The Printing Industry of America, alarmed by the shortage, has made several suggestions to relieve the situation. One is to ask the Civilian Production Administration to reinstate the controls, at least the old WPB Order L-120 which limited weights of paper at the manufacturing level.

An individual support of such a move is voiced by Herbert Ahrend of the D. H. Ahrend Company, New York City printer, in a letter to *THE INLAND PRINTER*. He sees a "necessity for the restoration of controls

on the manufacture, use, and inventory of paper, in order that the available wood pulp and rag supply be stretched as far as possible."

"We, as creative printers," Mr. Ahrend said, "find ourselves faced with increasing shortages and an even greater difficulty in obtaining a sufficient supply of paper—particularly coated stock. We are informed by our suppliers that the largest single factor in causing the shortage is the effort of many publishers to build up an inventory far greater than permitted under wartime regulations. In addition, the reduction in margin size, and sometimes in over-all page size, which served so well during the war, is being abandoned by more and more magazines and newspapers, creating wasteful usage of paper at a time when there is still far from enough to go around. For our own part, we have no objection to the restoration of quotas and limitations on the use of different weights of paper all along the line. Sixteen-pound letterheads may not be the most beautiful in the world, but they do carry the message."

Desirable as the reimposition of controls might be, it is doubtful if such a move would succeed now. The "moral climate" is unfavorable. The trend is to do away with all controls, including price. Even if reimposed, the controls would be hard to administer. The printing and paper experts are gone from Washington, and lack of the war effort incentive would defeat recruitment of dollar-a-year men who are badly needed at home to put their own houses in order.

As for reinstating inventory controls, the amount of hoarding is probably negligible in view of the over-all shortage, unless you call the purchase of mills one form of hoarding. Even a fairly large user of paper like *The New Yorker* is said to have had to hold up presses on an edition awaiting a shipment of paper. The Government Printing Office was recently within ten days of running out of paper to print the *Congressional Record*.

About the only control the commercial printer can hope for is a voluntary one on the distributor level. Paper merchants are resisting the demands of large buyers to take all of a particular kind of paper, preferring to share the supply with other regular customers. One New York City merchant told *THE INLAND PRINTER* that one of his salesmen wanted an entire lot of 30,000 sheets for a customer, but the paper house refused to give it all to him.

MANILA ASKS FOR LITERATURE

● Technical and scientific publications are desired for the scientific library of the Bureau of Science, Manila, Philippines, according to a request received from the secretary of the Department of Agriculture and Commerce, under the Commonwealth of the Philippines, Manila. The scientific library that had been built was destroyed by the Japanese during the war. Readers of *THE INLAND PRINTER* who have such publications to spare can render a service by sending them to Manila.

Another merchant refused to sell a quantity of high-priced paper to a desperate customer who normally uses a stock costing one-third as much. The high-priced paper was reserved for regular customers who had special needs for it.

As another suggestion for alleviation of the paper shortage, the Printing Industry of America told the paper manufacturers that the printers would support a price increase—either across the board for all paper, or for special kinds where price may be holding down production—if it could be demonstrated that this would increase the supply of paper. Printers will pay any reasonable amount now to get paper. They are not too choosy about kind or quality, and they too are in a sellers' market and can pass the increase along.

The Printing Industry of America is concerned not only with ways of getting immediate relief, but also with the long-range problem of paper supply, and here there is a conflict between the users and makers of paper. The PIA fears that the American paper industry, with its present policies, will never be able to meet the growing demand for paper. Annual paper production for the past two years has been between 8,000,000 and 9,000,000 tons, and it is not likely to go much above 10,000,000 tons annually in the next couple of years. The demand for paper, on the other hand, has increased 25 per cent over prewar needs, even with the use of thinner weights, according to the U. S. Department of Commerce. The PIA estimates that the value of products manufactured by the printing industry has increased 35 to 50 per cent over 1944. The PIA is asking the paper industry what it proposes to do to meet this greater demand.

A similar challenge was made by Walter Fuller, president of the Curtis Publishing Company, in an address at the annual luncheon of the American Paper & Pulp Association. Presenting figures which showed a strong probability that the national income would become stabilized in 1947 or 1948 at double the prewar level, as happened before and after World War I, Walter Fuller asked the paper manufacturers what they were going to do to meet this expansion of the national economy. Paper, publishing, and printing are essential to that expansion, he said. When the selling efforts, through advertising and other means, are curtailed, national income drops; when selling efforts are stepped up national income rises. A dollar of

sales effort adds two and one-half dollars to national income during a rising economy, Mr. Fuller said.

The paper industry is not likely to be high-pressured into increasing its productive capacity either too much or too soon. Traditionally cautious, it fears an over-expansion for the same reason that printing trades labor hesitates to ease the apprentice ratios—the possibility of another prolonged depression in five or six or ten years.

Printers differ with the paper industry on another count. The PIA is for free trade; the paper industry wants to keep its protective tariff. If the domestic industry cannot meet the demand, then the PIA advocates the purchase of wood, pulp, or paper from other countries on a free trade basis.

The paper industry, which fears foreign competition, points to what happened to the domestic newspaper industry when a free trade made Canada our chief source of supply. In 1913, before newsprint was placed on the free list, there were seventy mills in the United States devoted wholly or partly to the manufacture of newsprint. Today only four of these mills make newsprint and thirty-two of them went out of existence entirely. As a result, several communities in the East are now ghost towns.

The issue between free trade and protective tariff will be discussed at the forthcoming international trade conference, where proposed reduction in duties authorized by the Reciprocal Trade Agreements Act will be considered.

The Government Printing Office is also having trouble with paper procurement, because it is getting bids on less than 50 per cent of its estimated requirements. The GPO volume has dropped off two-thirds since the end of the war, but it still uses 500,000 pounds a day. The Government's uncertain and variable needs upset mill schedules, and the manufacturers would prefer to sell to the commercial users. Public Printer A. E. Giegengack told a group of paper manufacturers at the convention that he has appealed to the Civilian Production Administration for help and that the CPA, if necessary, would go to the length of issuing directives for the manufacture of paper for the Government. The life of the CPA is limited, however, and Mr. Giegengack said that if the situation did not improve in the near future the Government might have to follow the example of the magazine publishers and buy its own mills.

Add interest by varying shapes of halftones . . .



An advertising picture may not be worth ten thousand words . . . but it's a mighty important part of the printed advertising piece. Make the most



of pictures. Instead of the conventional rectangular-shaped halftones usually employed, add interest by varying the shapes. Even a meaningless pattern is



more "eye-catching" than a rectangular one. And when you can use a shape such as a diamond, heart, circle, *et cetera*, which has some significance . . . then you really have something!

By Glenn J. Church

From A "Stepchild" in the Industry to an Important Place in the Graphic Arts . . .

Silk Screen Printing Makes Rapid Strides

Chicago Club of Printing House Craftsmen Hears Expert Talk on Techniques, and Views Exhibit of Remarkable Full-Color Work Being Done by this Versatile Process

"SILK SCREEN printing has come a long way since the days, scarcely a dozen years ago, when an operator laboriously printed simple solid-color designs by the slow hand process," said Mr. George W. Reinke, the production manager of the Oil Color Litho Company, in his talk on "The Silk Screen Process" at the March meeting of the Chicago Club of Printing House Craftsmen. And when one considers the many beautiful full-color halftone reproductions being done by the silk screen process today, one is certain to heartily agree.

The Oldest Process

While the process has yet to take its rightful place alongside the other accepted methods of reproduction, according to Mr. Reinke silk screen printing is probably the oldest printing process known to man. It is an ancient Chinese art, with examples of this type of work, now several thousand years old, still in existence.

The process is basically very simple, Mr. Reinke explained. A quarter of a century ago stencils were cut out of shellacked vellum paper. This was attached to the silk screen with a hot iron. Ink was then forced through the silk (and the stencil) with a rubber "squeegee," and the silk screen print was the eventual result of the procedure.

Another early method involved painting the design on the screen with a soluble material, flowing on glue or gelatin, then washing out the resist, leaving on the silk screen the pattern to be printed.

All this left much to be desired, however, and about fifteen years ago, as a result of extensive experiments, a method was developed which made possible the reproduc-

tion of tones. A halftone positive of the copy was printed on carbon tissue (which is simply gelatin-coated, light-sensitive paper) and this transferred onto the screen.

Aside from the developments which make 133-line screen, four-color process work possible, the most important advancements have been along the lines of mechanization.

Various types of presses have been perfected to the point where, in place of speeds of 100 to 300 sheets per hour by the old hand methods, sheets may now be printed mechanically at press speeds up to 1,800 sheets per hour.

Numerous advantages are inherent in the process. One of the most important is the "stretchable" screen which can be increased or decreased in size to allow for paper size changes induced by temperature and humidity variations. Silk screen inks are durable and weather-resistant, and they may be glossy or dull, and there is no limit to the number of overprints which can be made.

A Versatile Process

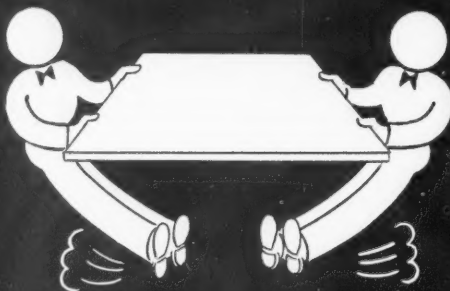
Any size area may be printed by the silk screen process. Any weight stock may be used. Printing can be done on any surface.

According to Mr. Reinke, many fields of possibilities for silk screen printing are still unexplored. Today's most common uses include posters, banners, and paper, metal, and glass signs. The toy and game-board industries employ the process for printing designs on

toys, juke boxes, *et cetera*. Glassware and glass bottles are decorated and labeled by the silkscreen process. In addition, fabrics, plastics, plexiglass, wood, canvas, bakelite, and masonite . . . all readily adapt themselves to being printed by this versatile printing process.

"New developments and improvements in materials, and its wide adaptability make the future of the silk screen process unpredictable," Mr. Reinke declared.

Says Mr. Reinke: We Silk Screen Printers Have Something Which You Other Printers Don't Have...



a "Plate Stretcher"

Yes, the standing joke of printing plants . . . the "plate stretcher" . . . is a reality in the silk screen business. Paper size change problems can be met by changing the size of the silk screen.

The edges of the screen surrounding the pattern are "stopped out" with lacquer, and the "plate" is ready for printing.

Requires Special Inks

Special inks are required for the process because of its nature and the wide variety of materials on which printing is done. Oxidizing inks are flat or gloss drying. Evaporating types include lacquer and ethyl cellulose.



Etchem...

A winter scene, heightened in its effectiveness by the use of the coldest of colors—blue—adorns the cover of the January issue of DuPont's excellent house magazine. Barren tree limbs, a leaden winter's sky, snow coating the tree on the windward side—all contribute to the striking effect. Even the snowflakes—Nature's masterpieces in design—add their bit. Another point, so often overlooked in design, is use made of the paper stock as "part of the picture"

WHAT IS Your OPINION?

Mr. Rundell presents here one side of the problem. Perhaps you don't agree with him. THE INLAND PRINTER wants to present both sides of the case and let its readers reach their own verdict. If your views differ from those expressed here . . . let us hear from you. We'll print as many good arguments as space permits. Let's have YOUR opinion.

BY
FORREST RUNDELL

● PERHAPS the time has come when the printer needs to sit down with his magazine publishers and say, in effect, "Look here, old man; this is my plant. I've worked hard all my life to build it up. For years I have served you faithfully at low prices. Now you want me to pass up more profitable business to take extra work from you at these same low prices. Just why should I jeopardize my future in order to swell your profits?"

How else can we keep magazine publishers from stuffing the general printing industry with business until it gets chronic indigestion? We have lots of business; nearly every printer can get all the work he can turn out. But like the gormandizer who crams his stomach until dyspepsia overtakes him, we are unhappy about the glut of magazine work. Already signs that it does not agree with us are becoming apparent. Here are a few of them:

1. It has aggravated the paper shortage. During recent months alone at least fourteen paper mills have been purchased by magazines which thereby assured themselves of a larger supply of paper. Total capacity of these mills is around 6,000,000 pounds per 24-hour day. Before it was taken off the market it is probable that at least half this tonnage was available for general printing. Multiplying 3,000,000 pounds by 300 (the average working days per year) shows a net loss of 900,000,000 pounds a year from these mills alone. Add to this the loss from privately owned mills which succumbed to an increased pressure for larger allotments by the smaller magazines and you begin to understand why your paper merchant says "no soap" when you ask for immediate delivery on paper.

Publication



2. In shops doing both general and magazine printing it has been crowding out much of the more profitable work. Before magazines went expansion-crazy many printers felt they had attained a good balance between low-priced publication work and the better paying general printing. Now, even though they have taken on no additional publications, an expansion of those they have has upset the balance. Whereas before they had reserve press capacity to make a good delivery on a catalog or a long run of brochures, the additional magazine work has made such delivery impossible. It is often months before a place for the job can be found in the schedule. Moreover, much profitable work must be passed up altogether. As a result the proportion of low-priced work is increased and the business thrown out of balance. The business which under former conditions did show some normal percentage of profit is now dragged below in spite of increased volume.

Sales Helps Are Essential

3. With so much of the capacity of the country's flat bed presses tied up with smaller magazines there is a strong possibility that the industry will soon be unable to supply all of the needs of firms requiring sales printing. As yet reconversion has not progressed to a point where great sales effort is needed. Goods are not on the shelves in large quantities. Sales promotion literature is not needed to move goods. Pent-up demand moves them. But as soon as real competition appears printing will be needed to back up space and radio advertising. More point-of-sale helps will be needed. And if, when stiff competition returns, the printing industry is still gorged with an overload of magazine work printers may be unable to supply all the sales printing needed. And if general industry is unable to buy necessary sales helps, its efforts to maintain full employment will be severely handicapped.

4. Another danger is that of a let-down in quality. Labor shortages, coupled with an increased demand for production, have led to employment of incompetent help. It has not been a question of how well a man could print. If he had run a press somewhere or had a union

card the only requirement has been that he be willing to work. Publications do not demand the grade of workmanship essential to produce good general printing. The price at which they are sold does not permit taking the time necessary for a first class job. The danger here is that sloppy habits acquired under pressure may be hard to overcome when normalcy returns. And don't forget that some of us have been crowding three years of press wear into one. No wonder register is beginning to give trouble.

5. Even greater danger is to be feared from a deterioration of our sales ability. In shops that are so crowded that they can take orders from old customers only, salesmen's efforts are limited to servicing these accounts, and to trying to keep all other accounts good-natured. As a result they are getting out of the routine of looking for the new customers. They are losing the keen competitive edge. When the time comes that they will have to sell hard again they will have the same handicap as a fighter attempting a comeback after five quiet years.

6. A shop so tied up that it cannot take new business misses many opportunities of securing new accounts. A certain percentage of new customers develops into steady buyers. A business can be built on a permanent basis only if it has a steady flow of such new customers. If the flow is cut off for several years a return to normalcy will find the printer without his necessary backlog of accounts. A figure often quoted sets 15 per cent of the total accounts as the number that must be opened each year to replace the normal losses.

7. Thousands of returning veterans are starting into business for themselves. Many will need printing. In some cases their needs will develop into substantial accounts. If we can't take new work we can't get in on the ground floor with this printing. And we may need these customers to carry part of the load when less lush days come.

What can we do to make the best of this muddle? Well, in the first place, nothing compels us to take unprofitable business. We refuse to take on publications we can't print; we can refuse to renew contracts that do not pay. Nothing but the

or Advertising Printing?

traditional awe in which the printing industry holds publishers prevents putting them on the same basis as other customers. Not that the printing industry is alone in letting publishers dictate to them. The paper industry is just as bad.

Look carefully at the recent price rises made in paper. You will see while we have to pay 10 per cent more for out-of-stock orders that go into general printing, the price for paper in rolls for magazine use *remains the same*. Ask your paper salesman if he makes as much as 1 per cent on a carload of paper for a big publication contract. In his paper-selling days the writer once made more profit from an order for 750 sheets of paper for a folder than the secretary of the company did on 31 cases of text paper for a magazine. The fact is that both the paper and the printing industries have let the publishers crack the whip. Now, if ever, is the time to persuade them to be reasonable about paying for what they get.

Second. As with the human body which is always in better health when its owner leaves the table a little hungry, a printing plant oper-

ates more efficiently if it is running just under capacity. The plant will be more profitable if it takes a few orders less than it believes it can print, especially if it drops a few that can be secured only by highly competitive bidding. Jobs manufactured on a cost plus basis are always more satisfactory than those taken under price pressure.

Third. We can make press time earn more money for us by selling more parts of the complete job.

If we can get our customer to let us buy and supervise the artwork and layout we will make our regular handling charge and will probably save him money to boot. Many artists prefer to deal with printers and agencies that bring the work to them. There is no selling expense connected with such sales. When they deal with the ultimate consumer they must assume a heavy selling expense in order to secure work. Consequently they are willing to sell to printers at the lower price.

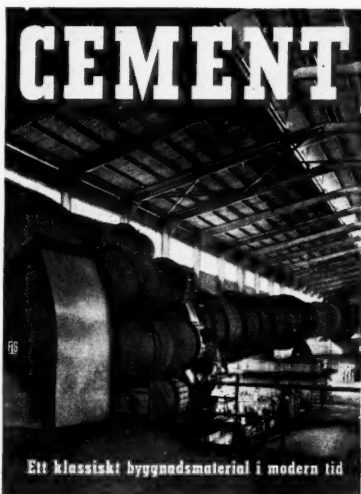
There is even more reason for us to buy the engravings. Working agreements with engravers permit many printers to buy at a lower unit price than that given to con-

sumers. In addition the printer knows more about laying out plates for an economical manufacture. On new work a handling charge for all engravings should be part of the money earned on every job.

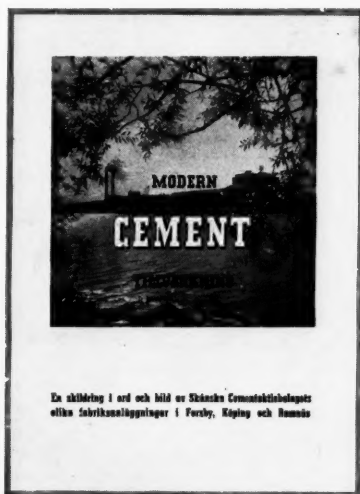
Furthermore, the printer should buy both the electros and the binding on every job. He can buy both better and cheaper than the customer. Above all he should either buy the paper or put a handling charge on paper furnished by the customer. If he buys the paper he is in a much better position than the customer to choose the right grade for the job. He is in a position to combine purchases to secure better prices. Furthermore, he takes the responsibility of seeing that the paper lives up to its promises. All of these things justify the regular profit he makes on the paper.

And if a publisher purchases his own paper the printer should by all means charge him for storage space, insurance, and handling.

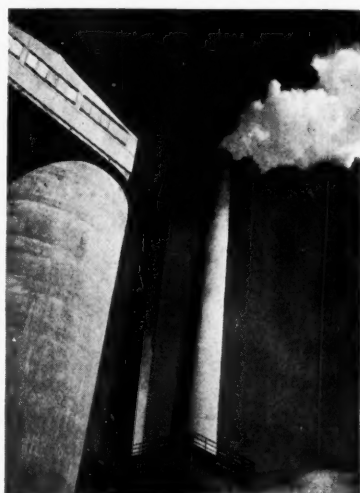
Finally, the printer should study every order offered him with an eye to its effect on future business. He needs accounts that will be giving him business years from now.



Cover



Title Page



Picture Page

Swedish Manufacturer Uses Modern Gravure Booklet to Tell the Story of Cement

● A Swedish manufacturer's story of modern cement methods and applications is appropriately clothed in a smart, modern booklet the cover, title page, and a picture page of which are shown above. The booklet is profusely illustrated with excellent photographs beautifully reproduced by gravure. In a brownish-black and rich blue on white stock, this unusual piece was designed and printed by the Esselte Company in Stockholm

Individual Plant Requirements Basis Upon Which to Determine Advisability of Letterpress and Offset Combination

By Richard M. Ong

● SHALL THE letterpress printer add offset equipment now?

The entire graphic arts industry has been bombarded with answers to that question. And, seemingly, most of the answers have been fired by proponents of such a combination of services.

But it is hard to believe that a question having as many potential ramifications as this has can be answered as completely, easily, and absolutely as the "combinationists" have done.

Too many factors are overlooked intentionally or unintentionally in their chain of logic. The statements and claims regarding future trends are too sweeping. Individual plant characteristics are not given sufficient weight; and yet it is on individual plants with their close and personal contact with and service to their individual customers that the growth of the graphic arts industry is based.

The advantages of each process as set forth by its adherents are conceded. The fact that the "printer of tomorrow" will want to offer his customers complete service is likewise conceded. The chances for additional revenue by possessing both types of equipment is also granted. And these two concessions cover the main arguments advanced by the proponents of combination.

But the conclusion at which they arrive after parading these arguments is not conceded. For there are other considerations not being presented by the "combinationists," which must be pondered over before an intelligent, impartial conclusion can be reached.

And even after these other factors are brought forth, any final conclusion must not be considered as the last word—the infallible Gospel—the New Graphic Arts Creed. But each plant must view its set-up, present and future, in light of all the arguments and draw its own conclusion on the basis of arguments pro and con, tempered by all its individual circumstances, conditions, customers, and records.

So this article will not attempt to show that the combination *per se* is wrong. What it will attempt to do is to bring out additional factors which will show that neither ex-

treme is 100 per cent right, that neither positive stand will solve the problem for each plant.

First, from the viewpoint of the customer, it is doubtful if a majority of printing jobs can be produced equally advantageously by both letterpress and offset.

Of the most importance is the quality of the finished piece. Accurate detail, sharp reproduction of halftones, soft blending of colors, or suitable paper stock may be so important to the quality and effectiveness of the finished piece that the medium for producing the piece will be dictated by this consideration.

If quality factors are equal, such things as cost, the use of the engravings in other printed pieces, the ability to change the type during the run or other mechanical factors may make a printing job better suited for one process.

In other words, from the standpoint of the quality (what the customer wants in terms of results), cost, or mechanical considerations, it is believed that only few jobs lend themselves equally well to production by either letterpress or offset; but that most jobs are "naturals" for only one or the other of these processes.

And potentially serious dangers face the letterpress or offset printer who rushes out to purchase complementary equipment just on the basis of the "irrefutable" arguments advanced by the proponents of the "combined services under one roof." A costly unbalance can easily result.

Consider what a "combination" (having both letterpress and offset equipment) printer would do in case his letterpress equipment were overloaded with a deluge of work while his offset equipment was idle, if at this time in comes a job which (because of its quality, cost, or mechanical factors) should be printed letterpress, but which can be handled on the offset equipment (now idle and therefore costly) at only a "small" sacrifice to the customer in quality, cost, or convenience.

What printer would withstand the temptation to use this job to turn the wheels on his idle offset equipment? Yet, when he does, the customer is deprived of having his particular job handled in the best

possible manner. (And that was one of the arguments paraded by those who favored this unfortunate shop buying both types of equipment).

And these same circumstances could be reversed so that a job eminently suited for offset would be run on temporarily idle letterpress equipment—still at a loss (in price or quality) to the customer.

In this case the printer with both types of equipment (purchased as a result of "joining in the parade" rather than as a result of careful study of conditions and customers) will be tempted to so arrange the job as to penalize his customer. And, by so doing, he will in the long run hurt himself and the industry.

Thus the problem as to what percentage of anticipated business will lend itself primarily to letterpress and what percentage will best be produced by offset is presented.

This is where the individual printer must consider all angles for himself in the light of all his own customers' requirements. Some will decide that their future is in maintaining shops offering letterpress only, others will remain strictly lithographers, while the remainder will offer "combined" services—but in proportions varying as a study of their individual set-up dictates.

For those who remain either letterpress or offset printers exclusively, perhaps answer to furnishing their customers complete service lies in a working arrangement with a house which offers the complementary service.

This policy, if adhered to with the good of the customer as the unalterable guiding principle, will answer the problem of "complete" service at least until experience and a study of records show that the time has come to add the other process in some degree to a one-process plant.

Then if a combination of services under one roof results it will be based upon experience and records rather than on a baseless following of the cry to offer both letterpress and offset NOW or face sure failure in the days to come.

Maybe as an ultimate result of this reasoned approach to how each plant can better serve its customers, present and potential, we will eventually all come closer to that "Utopia of Printers"—an industry where all units (letterpress, offset, and firms offering both processes) are doing work of quality to satisfy completely the buyers of printing; and work at a profit and under conditions that will satisfy completely producers of printing.

Coatings for Deep-Etch Offset

By Charles F. King

● IN ANY DESCRIPTION of the various methods and materials used in the lithographic process, it is very difficult to simplify all the material which it is necessary to cover, and at the same time be complete and accurate in every detail. Lithography is not a simple process. In the daily practice of the art, skilled craftsmen regularly employ materials the composition and reactions of which are not understood either by themselves or by the chemists and other technical men employed in the industry. Complete standardization of both materials and operations are impossible in the light of the varying conditions from one shop to another, and even within any one shop. Much of a standard routine which would be applicable to a 24-sheet poster house would be of little use to a stationery house. Similarly, many of the practices adopted as standard by a calendar house would be of little use to a planographic shop.

Fuller Knowledge Needed

Formulas have been published, most of which are the result of practical experience under very limited conditions. One such formula for a water fountain solution worked perfectly in the Middle West in cities which obtained their water supply from the Mississippi River or its tributaries, but it would not work at all on the East Coast. Each brand of ready-to-use preparations has its loyal supporters simply because certain plant conditions favor the use of one brand over another. As a result, operators are frequently transferring their loyalty from one brand or formula to another as the plant conditions change.

It will never be possible to attack all the problems of lithography intelligently until there is a fuller knowledge of the fundamental principles underlying this art and these principles are more generally known and applied. In the past ten years many check-charts have been published. Whole pamphlets have been printed about the troubles which arise in each of the various departments of a lithographic shop. Case histories have been written up. Open forum discussions have dealt with one specific problem after another. All these things have been a help to the operators; but all too frequently the trouble could not be

cataloged under a specific heading for which an answer was readily available. They have not prevented bad negatives and positives, ink that will not dry, albumin and deep-etch plates which will not print properly, and the multitude of other troubles which regularly beset this industry.

It is hoped that in this and future articles some of the general principles which are known can be presented in such a way that they will give the practical lithographer a better understanding of what he is doing and why he is doing it. There will also be included some



Charles F. King

Recognizing the increasing growth and importance of offset printing, *THE INLAND PRINTER* this month introduces its "second editor" on offset, Charles F. King.

Graduating from the University of Illinois, having completed the industrial administration course, with a major in chemistry, Mr. King started out as a salesman in the laboratory supply business, then went into the laboratory of the Woodward and Tiernan Printing Company in St. Louis, being placed in charge of the laboratory a year later.

He went to Montreal to take charge of the laboratory of what is now the Fred'k H. Levey Company of Canada. Later he supervised the laboratory of H. Blacker Printing Inks, Incorporated, Cincinnati, until it was closed for the duration, then entered the laboratory of the Lithographic Technical Foundation at the University of Cincinnati. When this laboratory was moved to the Armour Research Foundation in Chicago, Mr. King remained in Cincinnati as research director in the laboratory of the Cincinnati Lithographing Company.

ideas of what takes place in the operation of the lithographic process, which can not by any stretch of the imagination be called scientific facts; but by assuming that they are true, methods and materials may be varied to suit any conditions.

There is, perhaps, more information available regarding the deep-etch process than any other part of lithography. Complete descriptions of the technique to be followed are furnished by every manufacturer of deep-etch platemaking materials. The Lithographic Technical Foundation has published two complete research bulletins, one manual, and a textbook covering the gum process of deep-etch platemaking. These include workable formulas for preparing all the solutions necessary for the production of good plates. In spite of this, perplexing troubles frequently occur. By examining the process step by step it may be possible to visualize the underlying causes of many of the troubles which have rather commonly occurred.

Formulas for Coatings

Most formulas for making deep-etch coating recommend the use of gum arabic, ammonium dichromate, and ammonia. In some cases a dye is recommended to give the coating color. Many brands of prepared coating are based essentially on these formulas, although in some cases materials other than gum arabic are used. However, in all cases a material is used which is made less easily dissolvable by the action of light. Usually this action proceeds very slowly, even in the absence of light, and the light merely accelerates it in the areas exposed to it. Thus by exposing a plate to the arcs behind a positive, it is possible to harden or more fully insolubilize the non-work areas than the work areas.

Of all the solutions which are required in the lithographic process, deep-etch coating made from gum arabic is perhaps the most difficult to prepare properly. This is caused to a great degree by the lack of pertinent information now available concerning gum arabic. Certainly there are many references available concerning certain chemical and physical properties of gum, but few if any of these have any direct bearing upon its suitability.

for coating. In spite of the fact that gum arabic was first used in the lithographic process by Senefelder himself, very little is known or has been published about its action in the lithographic process, and still less concerning its property of becoming light-hardened.

Since gum arabic is a natural product, it is subject to some variations in both quality and chemical composition, depending upon the season of the year in which it was gathered, and the prevailing weather conditions of that season. It is formed in the wounds of one specie of the acacia tree found in North and Central Africa, and is gathered by hand and sorted by natives. It usually is contaminated with pieces of bark, straw, and other "dirt." It has been described by some chemists as belonging to the family of carbohydrates, to which some sugars belong, and containing in addition small quantities of potassium, calcium, and other minerals. There are many grades and descriptions of the quality of gum, but in most cases they have little or no bearing on its usefulness in lithography and more especially its ability to produce good deep-etch coatings.

Gum for Making Coating

The generally accepted description for the most satisfactory quality of gum for making coating is "No. 1 Pure Amber Sorts." Although coatings can be made from other grades, they are much less likely to be satisfactory. Powdered gum, although the easiest to get into solution, does not produce the crystal-clear amber solutions so necessary for the preparation of good coating. One set of instructions regarding the selection of gum for coating suggests that a good grade of lumps or sorts be tested, and then the balance of that lot be powdered for ease of getting the gum into solution. This is not good policy, since in the powdering of the gum, the dirt, bark, and other unwanted materials are also powdered. This makes it practically impossible to remove this dirt without the use of special expensive filtering apparatus. Also, either in the powdering or as a result of it, some change takes place in the gum itself. A solution made from powdered gum is much thinner (less viscous) than a solution made from the same lot of gum which has not been powdered, even though the density (Baumé reading) of the two solutions is exactly the same.

It is not definitely known, but this difference in viscosity of solu-

tions made from powdered gum and those made from lump gum may have some connection with the formation of cracks in the dried coating. These cause the plate to have small hair-like irregularities which will develop out and print "crazed" marks all over the non-work areas. So-called "purified" or "recrystallized" gums also exhibit this same property of low viscosity as powdered gum. In every case of cracked coatings which has been called to the attention of the writer in recent years, one or the other of these grades of gum had been used.

Filtering the Gum

The stirring of gum into solution is not good policy if the gum is to be used in making coating. Regardless of grade, all gum contains a certain proportion of a swellable but insoluble matter known to the gum importers as "snot." When gum is stirred into solution, this stringy slimy mass is dispersed throughout the whole solution, and makes good filtration impossible without the use of pressure filters and filter aids.

The most convenient method, and at the same time the method which will give the most satisfactory gum solutions for making coating, is to suspend the sorts or lumps in a sack

made of four thicknesses of cheese-cloth, in the manner described in the Lithographic Technical Foundation's Bulletin 6 for making albumin solutions. The sack is suspended in such a manner that the lumps are just covered with water and the bottom of the sack is as far from the bottom of the container as possible. Hot water is best for putting the gum into solution, and as the gum dissolves the bag may be raised in order to keep undissolved gum in the less concentrated solution.

Variations in Viscosity

If desired, the gum may be left to dissolve over night. In removing the sack from the solution, simply drain the bag for several minutes and throw away everything that remains in it. Do *not* squeeze the bag. Frequently a considerable portion of the gum does not dissolve. This undissolved gum may be stirred into solution for use in preparing press fountain water or etches.

Crystal-clear gum solutions with densities of as high as 16 to 18 degrees Baumé may be prepared in this manner. Although most of the published formulas call for gum solutions between 12 and 14 degrees Baumé many platemakers prefer to work with solutions having higher



Above: Present building, 8 Lord Street. Below: Newly-acquired quarters, 245 Erie Street.

● New equipment is moving into the second plant of J. W. Clement Company, large edition color printer of Buffalo, New York. The supervisory staff is being organized to handle the great expansion of the firm's facilities. Shown above are the two plants. At the widely known address of 8 Lord Street the building occupies the larger part of a city block. It will continue to operate 24 hours a day, and remains the company headquarters. The other structure is the newly-purchased C & B Terminal on Buffalo's waterfront, where a straight-line system for production of publications is being set up. Clement also maintains sales offices in New York City and Detroit as well as in Buffalo.

density. A gum solution made in the manner described above and having a density of 15.6 degrees Baumé will produce coatings very closely approximating the heavier commercial preparations on the market. When heavy coatings are used, whirler speeds, coating technique, and exposure time must fit.

As mentioned in the discussion concerning powdered gum, there is practically no relation between the viscosity of a solution of gum arabic and its density. Differences of as great as 50 percent have been noted in the viscosity of gum solutions prepared from the same gum by different methods of dissolving. This difference, however, is not as great in the final coating. The addition of the ammonium dichromate and the ammonia reduces the viscosity far more than would be expected. Dilution with an equal volume of water does not produce such a sharp drop as the ammonium dichromate and ammonia. As a result, just how much difference in the final coating thickness may be attributed to density and how much to viscosity is still a matter of question.

Hot Water for Dissolving Gum

Some lithographers will throw up their hands in horror at the thought of using hot water to dissolve the gum. It has long been recognized that gum solutions made with hot water spoil more quickly than those made with cold. If the gum is to be made into coating within twenty-four hours after it was started to soak, no bad effects will be noticed even in hot weather; but if there is a chance that the gum will not be made into coating for several days, one-eighth ounce of the U.S.P. Liquid Carbolic Acid (phenol) should be added for every gallon of solution.

There are other preservatives which may be used, but in most cases these materials do not work as well as phenol. Chlorinated phenols, and sodium salts of chlorinated phenols have been recommended, but spotty coatings have been known to result from their use. Dovicides are materials belonging to this class. Benzoate of soda is an excellent preservative for water fountain gum solutions, but it is not to be recommended for use in gum for coating.

Some operators attempt to dissolve the ammonium dichromate in cold water. Ammonium dichromate dissolves much faster in hot water than in cold, and there is no difference whatsoever in the final solu-

Conventions

What—Where—When

Lithographers National Association
Atlantic City, New Jersey
May 14, 15, 16

Southern Graphic Arts Association
Biloxi, Mississippi
May 17, 18

National Editorial Association
Estes Park, Colorado
June 13, 14, 15, 16

The International Association of
Printing House Craftsmen
Montreal, Canada
September 8, 9, 10, 11

tion. For safety's sake it is best to filter this solution through a good grade of "qualitative" filter paper. This is obtainable from any laboratory supply house in sizes which will fit a funnel of any capacity.

The use of dyes has frequently been mentioned in formulas for coating. Coloring matter in coating serves several purposes. The reason most generally given for its use is that it makes possible more accurate staging-out of unwanted work areas either before or following development. Another reason is that the coating is more easily removed in the final platemaking operation. Perhaps the most important function of the dye is to show up imperfections and irregularities in the dried film on the plate.

Particles in the Coating

Many operators have claimed that it is impossible for them to produce plates which have a uniform coating on them when they use dye in their coating. They say that small particles of undissolved dye are always giving spots on their plates. This may be true in some instances, but if the dye has been dissolved separately, and the solution filtered through the same type of filter paper recommended for the ammonium dichromate solution, there is little likelihood that the trouble is from this source. In fact the same criticism has been made by operators using dye solutions which have been filtered. It is very possible that these same imperfections exist in the coating when dye is not used, but they are not visible. This per-

haps accounts for some of the hand work so often necessary in finishing up a plate ready for the press.

In spite of the use of utmost precautions in preparing the gum and other solutions used in making the coating, it is impossible to eliminate all of the undissolved particles from the coating solution. There is reason to believe that some of these may form in the solution on standing, since commercial preparations which have been thoroughly filtered at the time of manufacture may also contain some of these particles. These are most easily seen when dyed coatings are used. Many of these smaller specks go completely unnoticed in undyed solutions.

Filtering the Coating

In order to reduce specks to a minimum, two filtrations are necessary. In most plants a pressure filter is not available. This is by far the best method of removing foreign matter from both the gum solution and the finished coating. However, gum prepared in the manner suggested above should not have to be filtered prior to its use in coating. A felt filter bag may be used successfully to free the coating of any foreign matter which would interfere with the production of good plates. Such bags are made in various sizes from about one pint capacity to one gallon, and can usually be purchased from bottling supply or laboratory supply companies. Ten to fifteen gallons of coating can normally be filtered through a one-half gallon bag in one hour. As the pores of the bag become clogged to a point where the flow becomes very slow, it is good practice to wash the bag. Usually five to ten gallons can be filtered before this is necessary. This may be done by turning the bag inside out and running water through it until it flows through clear. The bag should then be wrung out and rewashed several times before it is put back into use. After several batches of coating have been filtered through a bag, it is likely not to respond to this washing and rinsing operation. It then may be soaked in a 10 per cent solution of citric acid for several hours and rewashed with water. One filter bag will usually filter as many as from twenty to thirty batches of ten to twenty gallons each before becoming unusable.

Coating thus filtered when made should be refiltered at the time it is used. Filtration through several thicknesses of cheesecloth will usually suffice at this point, but if the coating contains material which is

not removed by the cheesecloth it should be put through the filter bag again. Storing of coating in amber bottles in a dark place seems to hold down the formation of these specks, as does the bottling of the solution in quantities just sufficient for the coating of one plate. It is possible that this action is comparable with the action which takes place when the solution is applied to the plate, and these specks are caused by the reaction between the gum and the dichromate.

Methods of Coating

There seem to be as many variations in the manner in which plates are coated as there are shops coating plates. Whirler speeds from as low as 20 r.p.m. to as high as 120 r.p.m. are considered standard in different shops. Some operators will pour all the coating in the center of the plate, others carry it from the center to the edge, or from the edge into the center, while still others flow it on much as the old-time cameraman flowed a wet-plate, and then whirl it dry. In spite of this, little variation can be found in the finished plates which is traceable to the variations in technique of coating. Furthermore, since all of these methods yield satisfactory plates, despite the differences in coating thicknesses, there seems to be little justification for the controversy regarding high and low density coatings, since there is no correlation between the density of the coating and method or whirler speed used.

The question of exposure time is not answerable in any one simple statement. It is only by a study of the factors which affect exposure and the conditions prevailing within an individual plant that any statement regarding correct exposure for deep-etch plates can be made. In the following paragraphs a listing of the variables encountered in most plants will be made, together with a description of the available methods of correcting or compensating for them.

Since coating thickness and exposure time are directly related, the foregoing description of the manufacture of uniform coatings is one step in the standardization of exposure time. The adoption of standard practice with regard to whirler speeds and methods of application of the coating is another step towards uniformity. In all lithographic work there are both maximum and minimum limits beyond which the operator can not go. The establishment of these limits, and the knowledge of what happens

when these limits are passed, are the first steps in standardization. As in the case of coating thickness, these limits are usually broad, but lack of knowledge regarding them usually accounts for spoiled plates.

Were it not for the wide latitude allowable in exposure time it would have been impossible to use arc lamps for exposing plates. There are no two arc lamps, regardless of their rating in amperes, that put out the same intensity of light. Furthermore, the same arc light will not put out a constant quantity of light from one exposure to another even if it is connected directly to a power supply which has no other load connected to it. The warming up and cooling off of resistors in the arc circuit itself will cause enough variation to be noticeable on a photo-composed or stepped-up plate. Some plants attempt to compensate for this fluctuation by turning the arcs on first thing in the morning to warm them up. In this way it is possible to lessen the difference between the first few shots and succeeding shots. Fumes and dirt which continually collect on reflectors and "hot-spot eliminators" vary the intensity of the light output of an arc as much as 50 per cent. Turning on other arcs on same line can drop light intensity 20 to 30 per cent.

Integrating Light Meters

All these variations caused by fluctuations in arc intensity can be reduced to a point where they will no longer cause trouble by the installation of one of the several brands of integrating light meters now on the market. These instruments actually add up the amount of light which falls on a plate and indicate, regardless of the amount of time required, when the exposure is complete. If the line voltage drops or surges, if the power fails completely, if the reflectors get dirty, or if the resistors are cold or hot, or even if the distance of the arc from the printing frame is varied, the instrument automatically compensates for these variations, giving longer or shorter exposure, whichever is required. It is even possible to change carbons in the middle of an exposure without affecting the finished result. In spite of the fact that one brand of these instruments has been on the market for almost ten years, little interest has been shown in them until very recently.

Another factor affecting exposure time is relative humidity. It is possible that both temperature and relative humidity play an important role in varying the sensitivity of

deep-etch coating, but as yet no one has published any information concerning the effect of temperature. Until more definite information is available, there is no way of giving any all-inclusive formula to follow to compensate for changes in temperature and relative humidity. In fact the only specific information which has been published has applied to albumin plates. Most instructions for making deep-etch plates have simply stated that the sensitivity of the coating did vary with changes in relative humidity, and suggested that the operator make a chart by which he could compensate for these changes. Of course the solution to this problem is complete air conditioning to take care of changes in relative humidity and temperature.

Sharp-Edge Dot Positives

All the variables mentioned will have little effect on the finished deep-etch plate if the platemaker is furnished with sharp-edged, hard-dot positives. With such positives it is possible to give a plate unbelievably long exposures without materially altering the tone values. To prove this statement, select a good hard-dot, half-tone gray-scale. Step it up either in a printing frame or on a photocomposing machine, giving each step a longer exposure than the previous one. Start with some exposure which is less than half the exposure regularly used, and increase the time of each succeeding exposure in regular uniform steps until the last exposure given is more than twice the normal exposure. In one such test recently made, the normal exposure for the prevailing conditions of temperature and relative humidity was five minutes. Exposures of two, four, six, eight, ten, and twelve minutes were given. When the plate was finally inked up, and the dot areas compared, very little difference was noticeable between the first and last exposure.

It is not always possible to furnish such hard-dot positives to the platemaker since in color correction it is frequently necessary to use screen, rather than contact, positives, and dot-etching naturally destroys some of the density in the finer tones. Furthermore, correction artists require positives with a certain amount of softness to the edges. Such positives will not permit the extreme range of exposures described above without much greater variation in tone values. The platemaker should study the limits of exposure practicable with all types of positives.

**As a Means of Cutting Printing Production Costs . . . Increasing Press Output . . .
and Eliminating Standing Press Time, Considerable Attention is Again Being Given,
Both in This Coun-
try and Abroad, to**

Pre-Makeready Methods

● FOLLOWING the close of the war, and with attention centered on re-conversion from war time to peace time production, an increased consideration is being given to securing the greatest possible production from machines, and reducing the idle or standing time to a minimum. Especially is this true with printing press production. An unusual revival of interest seems to have been created in pre-makeready methods, ways and means for eliminating or reducing the time that elapses between finishing one run on a press and getting the next run started—in other words, increasing the time that presses are producing actual impressions or printed sheets.

Much of this interest apparently is directed our way from foreign sources. In recent weeks *THE INLAND PRINTER* has received letters from France and Holland, and an article in one of the trade journals from England. The methods described in the letter from Holland and the article from England appear to be the same as or similar to the methods advocated and practiced in some plants of this country for a good many years. The letter from France, which is accompanied by examples of the work produced, describes a method which is along somewhat similar lines but goes further, considerably deeper, into the problem of eliminating makeready. All, however, advocate some form of pre-makeready, with greater precision in machinery, equipment, materials, and methods.

The Letouzey Process

Victor Letouzey, president of Letouzey et Ané Publishing and Printing Company, and president of the Printing Research National Board, Paris, France, describes a method he has developed, and has patented in France, Belgium, and Switzerland. Some of his description is a little vague to us, due to difficulties of translation. However, the Printing and Allied Trades Research Association (Patra), of London, after investigation has included the following brief description in a recent issue of *Patra Journal and Printing Abstracts*:

"With the Letouzey process the packing (or overlay) is uniform in

thickness, plasticity, and elasticity throughout its surface, and the heights of the printing elements are varied according to the 'density of blackness' of the printing elements. In the case of a single letter this 'density of blackness' is represented by the ratio of the area occupied by the actual face of the letter to the total area occupied by the letter. For the whole form it can



Victor Letouzey, of Paris, France, at left, and G. M. van Wagtendonk, of Amsterdam, Holland, at right, both ardent advocates of pre-makeready as a means of reducing the standing time of presses, and for increasing press production

be measured by means of an instrument called a 'planimetreur-comparateur,' details of which are not given. Each letter is arranged to have a height which is in conformity with this 'density of blackness,' but the method of obtaining the variations in the height of blocks is not explained.

"The next requirement is that the press shall be in perfect condition, and, in particular, that the distance between the bed of the press (or the printing cylinder without the plate) and the impression cylinder without the packing shall be constant throughout the line of printing. This is tested by placing a special carbon paper over the form and covering by a sheet of paper and then printing. The uniformity of impression is checked by observing the uniformity of transfer of the carbon coating. The preparation of the form is carried out in the composing room, and the only work the pressman has to do is to see that his machine is in perfect condition and then to start the run."

Mr. Letouzey advises *THE INLAND PRINTER* that he is now working on the application for offset, and hopes soon to work with friends in the

United States, and to make additional progress in developing his process through the "support given by the powerful means of U. S. science and industry."

In one letter Mr. Letouzey states that some of the special requirements or equipment for the method are composing machine matrices with relative heights; the precision chases with precision gauges and quoins for the justification control; precision proof press; special carbon paper for mechanical proofs; pressure and non-pressure gauge for measuring heights of the printing elements and of the tympan; precision registering chases; electronic precision gauge for measuring the density of the printing elements and for trichrome printing color measurements; and parallel precision quoins.

He further states that the register is always automatic, there is no makeready or pre-makeready, and the standing time of the press from a finished run to a new run is from seven to eleven minutes.

Mr. Letouzey also announces that he started to learn printing a few years ago at the age of sixty, and has applied the same principles of objective scientific engineering he employed in his former connections, and during his former research and study. He is now operating a plant located in Gentilly, near Paris, and he is producing books and other printed sheets, with and without any illustrations, automatically, and with makeready or pre-makeready absolutely eliminated.

Methods Advocated in Holland

From Amsterdam, Holland, G. M. van Wagtendonk writes *THE INLAND PRINTER*: "In every printing office the question arises daily as to how the cost of printed matter may be reduced. It is possible to economize in various ways," he says, "but little if any attention is paid to the standing time of presses during the preparation of forms. This unproductive time," he continues, "has a marked effect on the final cost of printed matter."

"If we should check the time which is lost between the moment at which the form is put on the press and the first correctly printed

sheet," says Mr. van Wagtendonk, "we would arrive at the startling conclusion that all the presses are stopped for from 40 to 60 per cent of the total working time during the preparation of the form. It is simply deplorable when we realize that all the capital invested in the presses is lying idle for one half of the time.

"Especially now at this time," he states, "when new machines are so hard to obtain, and when wages are rising, there is the greatest necessity for preventing machines from standing idle during the preparation or correction of forms."

Mr. van Wagtendonk has worked for some years on the perfection of the pre-makeready system, and he remarks that every printer in the Netherlands is now convinced of the great value of it. The schools of printing have installed pre-makeready departments, and in their examinations at these schools the pupils have to be able to answer important questions pertaining to pre-makeready.

Start in Composing Room

The method, he states, may be divided into two parts: checking the letter height and squaring the printed form; and, the improvement of the printing form on the basis of the deviations shown by the checking. The checking of material which goes into the printing form, he says, should be started in the composing room, and all composing material should be subjected to careful checking regularly. For this purpose, a precision measuring instrument is used. The first checking takes place upon the receipt of new types. A few letters from all sets are tested for height. If deviations of more than 1/100 mm. are shown, the type foundry has to provide a substitute. The same test is made on all the line and ornament material.

Also the product of the composing machines is checked regularly, daily, in fact, and trimming knives and casting temperature of metal are watched carefully. Then, too, precision proof presses are used, all proofs are inspected, and damaged letters or lines are replaced in the composing room before the form is made up. Etching depth of printing plates, halftones, is checked to determine whether the various lights, including high lights, middle tones, and so on, have been etched to their proper depth.

Forms are made up in the pre-makeready department, which is under the supervision of a skilled

printer "as he is most familiar with all the technical printing demands made on the form." In this pre-makeready department the supervisor has at his disposal a precision block leveler for preparation of the plate bases; a precision saw for sawing plate bases and other material square to measure; a measuring instrument for measuring the height of mounted plates under pressure, also a lineup table and a form liner.

In short, the work of leveling up the entire form is done before the form is sent to the pressroom. As Mr. van Wagtendonk explains, "the object is not so much the saving of labor as the shifting of various activities to departments having a lower hour cost, or to a department which has a lower capital investment." All the printers in the Netherlands who have adopted the system find that they have made savings varying from 30 to 65 per

cent in the machine time, and the quality of the finished printed matter has been improved.

Norman Skinner, in an article in *Paper and Print*, London, refers to pre-makeready as "form precision." In up-to-date plants which have adopted pre-makeready, he states, due attention is given to all factors before the form is passed for press, with the result that the pressman is enabled to commence his run in a fraction of the time required under the old methods. He has only to concentrate on true makeready, which is negligible, for the simple reason that the form has been built up from accurate components with meticulous care.

Basic Accuracy Essential

Basic accuracy is essential, says Mr. Skinner, and the basic accuracy of any type form depends upon the chase. A good chase, he states, is one that is true at all angles. As the chase is to the type form, so the mount is to the plate form. Patent metal mounts are not prone to give trouble, but if wood blocks which have outlived their usefulness are used, then "add a good covering percentage to your machine cost." Replacing wood furniture and reglets with metal is recommended by Mr. Skinner, also the making of overlays and interlays before the form is made up.

Cooperation between all departments and also between the printer and his suppliers, says Mr. Skinner, is a very essential adjunct to the achievement of any success in this objective of pre-makeready. Also, "pre-consultation" between departments might be another and better term for pre-makeready.

Mr. Skinner emphasizes an important point when he refers to the imperative demands of competition, and says: "When the present flood of work eventually subsides the letterpress printer will feel the keen competition of the other processes to a far greater extent than hitherto. He must be prepared to meet this competition in no uncertain manner. One of the very great advantages of litho, for instance, is the ease and speed with which the job can be prepared for printing.

"We must make it our responsibility," he continues, "to see that everything within our power is done to achieve similar conditions in letterpress machine rooms. Only by a greater realization of the need for 'form precision' can we hope to meet this competition on more equitable terms than those prevailing at present."

Not A New Idea

but it's nicely handled here

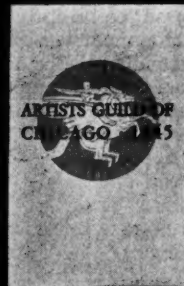
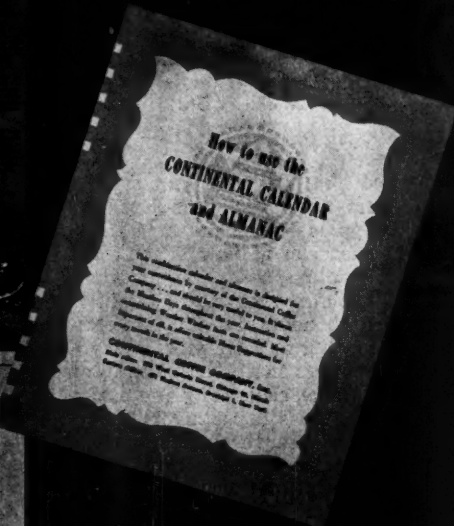
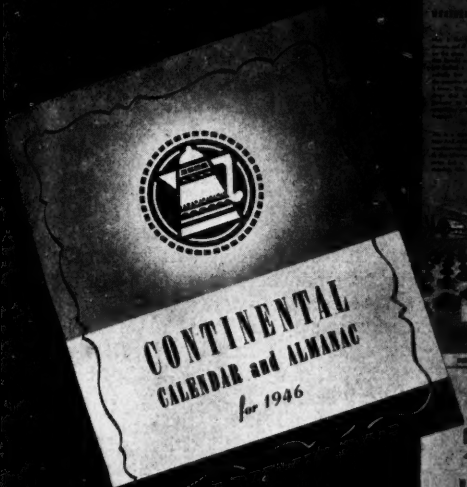


May 1946

<i>Sunday</i>	5	12	19	26	
<i>Monday</i>	6	13	20	27	
<i>Tuesday</i>	7	14	21	28	
<i>Wednesday</i>	1	8	15	22	29
<i>Thursday</i>	2	9	16	23	30
<i>Friday</i>	3	10	17	24	31
<i>Saturday</i>	4	11	18	25	

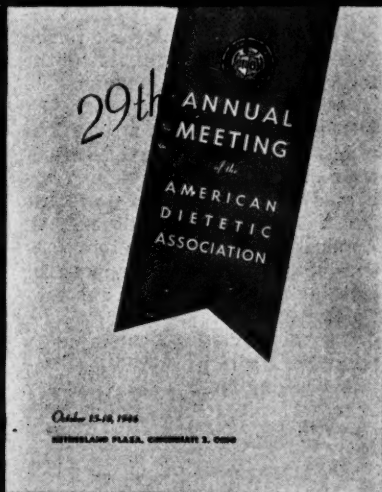
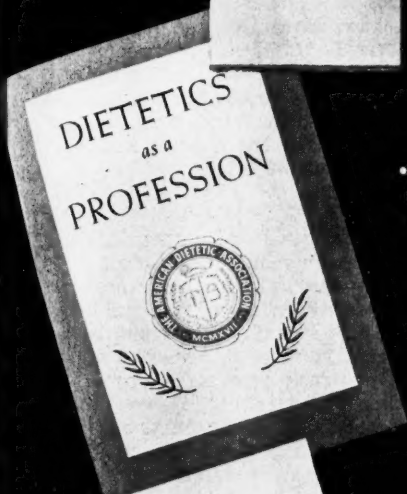
R. R. DONNELLEY & SONS COMPANY The Litho and Print
230 EAST TWENTY-SECOND STREET - CHICAGO - ILLINOIS

For the calendar advertiser who wants something different from the conventional calendar pad arrangement . . . here's an idea. R. R. Donnelley & Sons Company of Chicago made use of it in their attractive calendar for the current year. Page size is 11 by 14 1/4 inches. The top panel is in blue with illustration and type in white reverse. The lower panel is brick red with white figures and letters. Ever-popular Caslon combines nicely with the modern sans-serif type used. All pages are identical in design and colors.



Typical Typography of Edward Schubert

- Conservative, dignified, neat . . . some of the qualities typifying the typography of Edward Schubert, salesman-typographer with the Neely Printing Company of Chicago. Thought and care in the choice and use of types is well demonstrated in this representative showing. Colors fittingly selected complement the typographical designs. The calendar was printed by offset in brown, red, green, and tints of these colors. One particularly interesting piece is the booklet cover (at the left) printed by letterpress in brown and a blue tint on ivory stock, with the seal embossed.



New York Printers On-The-Job Veteran Training Program Shows Good Progress

BY GLENN C. COMPTON

New York Editor

● THE NEW YORK Employing Printers Association has just obtained approval from the Industrial Commissioner of New York State of its training-on-the-job program that qualifies veterans of World War II for benefits as trainees in office jobs leading to their competency as executives in the accounting and financial, estimating and production, and sales departments of printing firms. There are in reality three programs, a separate one for trainees in each of the departments above mentioned.

The association has also received the tentative approval of the New York State Apprenticeship Council for the apprentice training plan which closed-shop members and the unions have conducted for many years, and for a new apprentice plan developed by the open-shop section of the association.

Approval of the New York training program and apprentice plans marks the climax of an intensive campaign for veteran recruitment which was launched shortly after V-J Day. Advertisements used in local dailies and the trade press called attention of veterans to the association's employment program. Under the direction of an employment committee headed by Mr. Ira Frank, the president of the Correct Printing Company and treasurer of NYEPA, key executives of member firms assisted Miss Beatrice Baumgardt, manager of the association's twenty-five-year-old free employment bureau, in interviewing and counseling veterans seeking employment in the printing industry.

Benefits While Training

In recent months an average of 150 veterans a day have called at the association's offices. Since last autumn the employment bureau has placed 400 veterans—200 of them in January and February alone. Several times this number have obtained employment by direct application to member firms. Don H. Taylor, executive vice-president of the association, estimates conservatively that 1,000 veterans have been employed in the offices and shops of New York printing firms since last autumn. These and veterans yet to be employed will now obtain benefits while training,

if their employers follow the simple procedure that has been outlined for them by the association.

Approval of the training-on-the-job program is a blanket one, which means that every active member of the association is certified to the Veterans Administration as having approved training programs. Individual firms have only to follow the procedure outlined to qualify a veteran for the benefits. The thorough manner in which the association has spelled out the steps of this procedure for its members sets the program apart from similar ones in other printing centers.

Procedure Outlined

As Mr. Taylor expressed it, "the whole thing was carefully 'buttoned up' before it was presented to the membership." The approval was obtained on March 1. On March 14 the association sent a mailing to its members which contained the following: (1) a letter from Daniel A. McVicker, president of the association, announcing approval of the program and urging members to take advantage of it; (2) a booklet describing the three programs—accounting and financial, estimating and production, and selling; (3) a copy of the Industrial Commissioner's letter of approval; (4) the six-step procedure the employer and veteran must follow to qualify; (5) text of a form letter to be returned by the employer with the veteran's certificate of eligibility and entitlement; and (6) a copy of the "wage certificate," the monthly report required from the employer on each veteran trainee. Quantities of the form letter and wage certificate will be supplied by the association.

Other printing trade associations which may be developing veterans' training programs can profit from a study of the six-step procedure outlined for members of NYEPA. Applicable both to training-on-the-job programs and apprentice training plans, the plan is substantially as follows:

1. Veteran must be employed by an active member of NYEPA.

2. Veteran must fill in and file Form 1950 with the regional office

of Veterans Administration, along with a photostatic copy of his discharge from the armed forces. On the filing of this form, the veteran will be given a receipt. About two weeks later, upon completion of investigation by the VA to determine the veteran's permissible training period, based upon the extent of his military service, the veteran will be mailed Form 1953 by the VA.

3. Upon the receipt of Form 1953, which is a certificate of eligibility and entitlement from the VA, the veteran will give it to his employer. Employer must then fill in date veteran started employment, name of employer, and statement that the veteran will be gainfully employed while being trained.

4. The employer must then return Form 1953 to the VA with a form letter addressed on his letterhead to the regional office of the VA, to which must be attached a copy of the program under which the veteran is to be trained.

5. The VA, after receipt of completed Form 1953, will certify the veteran's name to the VA Finance Office, and payment to the veteran will start as of the date of filing Form 1950.

Monthly Reports by Employer

6. Employer must report monthly to the VA on regular forms to be supplied—the wage certificate previously mentioned—the following information: Employer's monthly payments to veteran, exclusive of extra pay such as overtime, commissions, or bonus that is over and above the basic pay amounts provided in the program under which the veteran is being trained; weekly (or hourly) rate of pay; the number of instances of veteran's tardiness or absence from work. Report must also include a statement that payment reported does not include any overtime, commissions, bonus, or other income which might have been either directly or indirectly paid to the veteran.

To answer questions on the program and to assist the printer in untangling any red tape that might hold up a veteran's qualification, the association has set up a Veterans' Training Department at its headquarters, which is headed by James H. Griffin, a war veteran who

was a captain in the 649th Engineer Topographic Battalion.

The printing industry's veterans' training program has aroused considerable interest in New York City and has received a great deal of newspaper publicity as a model plan other industries might well emulate. One paper has taken photographs of veterans at work in plants, and Collier's is preparing a feature article on the printers' program.

In carrying out both the training-on-the-job program and the apprentice training plans, the New York printing industry will for the most part make use of its long-established educational facilities. For this reason the industry is escaping the onus attached to plans used by some companies in other industries or businesses, where training programs are hastily developed and companies are suspected of using them as a subterfuge for paying substandard wages to beginners.

Apprentice Training Plan

For twenty-five years the Printers League Section or closed-shop group of NYEPA has maintained apprentice schools in cooperation with the printing trades unions and the Board of Education. Apprenticed veterans will receive part of their training in these schools. The number of veterans who can obtain employment in this category is limited by the apprentice ratios in union shops. In some cases permits are granted to veterans when there are no apprenticeship openings in the plant at the time.

The Master Printers Section of the NYEPA, representing about 200 open-shop printers in the association, has developed an apprentice training method with the assistance of the Federal Apprentice Training Service and the New York State Apprenticeship Council. It calls for a five-year term of apprenticeship for compositors and pressmen, and four years for the binders, with 144 hours of related instruction each year. For the related work the Master Printers Section will establish classes at the New York School of Printing, in cooperation with J. Henry Holloway, principal.

Veterans employed in office positions will supplement their training-on-the-job with evening courses that are held by the association's thirty-year-old educational department. Courses applicable to one or more of the three training programs are: elements of printing, elements of offset lithography, cost accounting, financial management, elementary and advanced estimat-

A Printer Who's Unhappy With the MM Paper Plan

I HAVE been reading about the MM Plan and in the language of Amos, of the team of Amos and Andy, I am "regusted." I don't understand what it is all about and I am writing this letter to you with the hope that you will receive a sufficient number of letters from readers of THE INLAND PRINTER to indicate to you the trend of their thoughts in regard to this new plan for paper sizes and weights and use your influence (which is considerable) to kill off any such new brain-storm.

Why is it that someone is always trying to improve the lot of the "poor" printer? Is their lot so bad that it requires improving?

All of us in the printing and allied trades are thoroughly familiar with the sizes and weights of bonds, ledgers, bristols, coateds, and uncoateds, and I do not believe many of us have any difficulty whatsoever in determining the weight of an odd-size sheet of paper or the size of an odd-weight sheet of paper.

Why create a great deal of turmoil in starting an entirely new system? Haven't we got enough trouble now with labor shortages, with scarcities of equipment, and other scarcities without having to worry about a new MM Plan? Of what value is it to be able to determine the weight

of some mailing piece before it is printed when it is so very simple to make up a blank dummy and get the exact weight? And what about the ink? Will the MM Plan determine the weight of ink?

And what provision does it make for varying weather? I recall some years ago we were mailing out a monthly magazine and the post office complained that it was overweight for the postage we were paying. We could not understand this. We thought, perhaps, that the magazines were trimmed slightly oversize and after making a careful checkup we found that the size was correct. While we were printing this job, which took five or six days, it rained considerably and it was still raining when the magazines were delivered to the post office. The paper had absorbed sufficient moisture to make them go over the pound rates which we were paying. Will the MM Plan take care of this?

L. A. BRAVERMAN,
The Fleuron Press,
Cincinnati, Ohio

What is YOUR opinion of the MM Paper Plan? THE INLAND PRINTER welcomes letters from readers on both sides of this controversial subject. As many comments will be published as space permits.

ing, production management, selling printing, and public speaking.

Each training-on-the-job program covers three years or six six-month periods. The applicants must have a high school education or its equivalent. The trainee is paid a beginning salary of \$30 a week, which is raised \$5 at six-month intervals until it reaches \$60 at the end of the three-year training period. This latter figure, of course, is far from the limit which may be reasonably expected once the training period is over.

On the basis of the satisfactory experience the industry has already had in the employment of war veterans, and the hope that the training programs and apprentice plans

will speed the training of many more, the association sees in the war veteran an unusual source of labor that will measurably reduce the manpower shortage.

"Skilled labor and trained office help on the junior executive level are not available to meet the industry's needs, so we must take beginners and share in their training," said Mr. Taylor. "In order to have competent craftsmen, salesmen, accountants, estimators, and production men in the future, we must make a contribution to their training now. By taking advantage of the approved training programs and apprentice plans, printers can obtain Government assistance to this end."

**For an explanation
of the MM PLAN ...
refer to the October
1945 issue of THE
INLAND PRINTER**



BREVITIES

Edited by H. V. Downing

ITEMS ABOUT THE TRADE AND THE MEN WHO MAKE IT. BITS OF INFORMATION COLLECTED AND SET DOWN HERE FOR YOUR EDIFICATION AND PLEASURE

● IN A LETTER of congratulations to Howard A. Storrs, who recently took his father's place as editor of the *DeFuniak Herald*, DeFuniak Springs, Florida, "Uncle Cleve" Cleveland, who had owned the paper for thirty-two years, wrote the following:

"Now, a good 6-shooter could be purchased for perhaps \$40; a hundred cartridges would cost only a trifle more and then you could have gone on the road and been a highwayman or something like that, and made more money and made it easier. As an old newspaper man, I am reasonably familiar with all conditions that beset a country newspaper man.

"But my best wishes go with you, boy. I hope that you may run the *Herald* as long as I did. I also trust that, at the end of that time, you may become a nice juicy watermelon and be eaten by a pretty girl."

● PEOPLE WHO Almost Became Printers: George Arliss, the English actor who died recently, was the son of a printer and publisher. Mr. Arliss found work in his father's office "appalling" and left it to start his theatrical career at a salary of about \$150 a week.

● HEAD of the Iowa publishing dynasty, Gardner Cowles, Sr., died during the evening of his eighty-fifth birthday on February 28.

Born two months before the Civil War, the first permanent job of this minister's son, after his Iowa education, was that of school superintendent at Algona. He eventually became a successful banker and political leader. But at 40, in response to an appeal for aid from Harvey Ingham, editor emeritus of the *Des Moines Register and Tribune*, he suddenly tied up his capital and future hopes in the newspaper business. He purchased the *Register*.

From that point on this story of Iowa thrift and hard work is well known. Two sons carry on in the publishing business: John Cowles, president of the *Minneapolis Star-Journal and Tribune*; and Gardner Cowles, Jr., president of the *Register and Tribune Company* of Des Moines. The third son, Russell, is a successful painter and lives in New York City.

● THE PRINTED word gets around!

A few weeks ago ex-serviceman Irving Berger of Bridgeport, Connecticut, stopped by NYEPA's employment bureau in New York City. He had a tattered clipping from *Pic* magazine for November, 1945, of a column titled "Backstage with Business" by Cameron Day. Under a miscellany paragraph an item read:

"New York Employing Printers Association looks for raft of openings in trade, has program for vets returning to, or entering, field. Ira Frank, of Correct Printing Company, runs show . . ."

Berger first saw the item while at Guam. He planned on returning to work in his home town but stopped at the bureau for information about the industry in general.

● Bertrand H. Turner, retired superintendent of the mechanical department of the Hartford (Connecticut) *Courant*, died on February 28 at the age of 72. He and members of his family gave the *Courant* 185 years of combined service in the same department. His own career covered fifty-five years, Mr. Turner having joined the paper as an apprentice printer.

● HOME FROM THE WARS: E. J. Yagow, sales representative in Oklahoma, Texas, and Arkansas for the Goss Printing Press Company, Chicago. Because of precision engineering experience, Mr. Yagow was stationed at Aberdeen Proving Grounds, Maryland . . . Dr. Harold E. Rhame, commander in the Navy Medical Corps, and a son of Charles C. Rhame, manager of Linotype's New York sales agency, has resumed his surgical practice in Brooklyn.

● THE SECRET is out: During the war Harris-Seybold-Potter Company, working with officers of the Air Technical Service Command, developed and produced an intricate, compact precision bombing computer for use with Shoran, the navigational radar system developed by RCA. Shoran determines the exact position of aircraft. The computer calculates and makes alterations of the Shoran equipment. H-S-P men most responsible for the computer are W. R. Spiller, L. D. Barley, and F. J. Hooven.

Offset Night Big Attendance-Puller at Meeting of Craftsmen

A novel program, which included an actual demonstration of the making of an offset printing plate, was presented to the Chicago Club of Printing House Craftsmen at a recent monthly meeting.

With the aid of temporarily set up equipment, an offset platemaker performed the actual steps in the process, while a narrator gave a detailed description of the operations involved.

Interest in this unusual program, as well as in offset printing, was evidenced by the unusually large attendance of around four hundred.

For future meetings, plans are being made for "Gravure Night," and "Kodachrome Night."

● SEATTLE missed a chance at an unusual mayor but retained an outstanding printer when Frank McCaffrey, a past president of International Association of Printing House Craftsmen, lost out in his recent race on a non-partisan ticket for mayor of that city.

Three other candidates received more votes but none had campaign literature that was as handsomely designed and printed as McCaffrey's.

● A WEEK of work is no trivial thing in South Africa. Two years ago the Typo Union negotiated for a reduction of its 46-hour week to one of 40. Agreement was reached on 44 hours. Now, after prolonged parleying, the 40-hour week is in sight: this year the week is 43 hours; 42 in 1948, and 40 in 1949.

This information came to us from O. H. Frewin, typographical craftsman, printer, and publisher of Middelburg, Transvaal, South Africa.

● ANOTHER "old-timer" has gone to join his friends. H. A. Blodgett, who made a specialty of bank printing at his plant in St. Paul, Minnesota, died late this winter. Widely known in direct mail groups, he lived and worked hard and was 76 years of age at the time of his death.

● PEOPLE may act coy about the number of years they personally have been doing business at the same stand, but they are proud of the age accumulated by their house of business.

Picked at random from response to a recent IP mailing, these firms have been at it for a century or more: Herald Press Limited, Montreal, 1811; Citizen Job Printing, Jackson, Michigan, 1837; Spectator Publishing Company, Palmyra, Missouri, 1839; Spartan Printing Company, Spartanburg, South Carolina, 1844. Leader in longevity was William Lewis (Printers) Limited, Cardiff, Wales, established in 1780 "and still battling!" As the Spaniard puts it, "How many years have you?"

● ASHTON C. STEVENSON guarantees the fountain of youth at Ponce de Leon, Florida. He says he grows younger while every trade paper he picks up announces that some old friend has gone to his just reward, or to "set an acre of red-hot agate."

He closed his Lino-Tabler factory in Chicago at the beginning of the war and roved to his tung oil nut plantation in Florida, which "borders on a large lake abounding with fish." He's been taking mail orders on furniture molds and adjustable liners, but doubts if he "would care to take up again the hurly-burly of Chicago."

But he inquires wistfully about the old "Printer" crowd, so some day he may leave the Florida sun, his horse, cattle, chickens, dog, cats, and tung oil, and return to the "big city."

A Printer Contemplating Construction of New Plant Seeks Information on Air-Conditioning and Lighting

THE QUESTION

We have outgrown our building and are planning to erect a new building in the very near future. This presents us some problems and I want your help in this matter. We plan to erect a one story building with solid walls, or at least using glass block in place of the conventional windows, and we intend to completely air-condition this building twelve months a year. Do you have any information which would tell us what would be the proper temperature and relative humidity to maintain year in year out, and within what tolerances this air-conditioning system should be set? Should different conditions pre-

vail for the letterpress and the lithographing departments?

To date we are equipped only for letterpress, but we are making provisions in the new building for a lithograph department and are enclosing each department within its own four walls so that we may maintain the proper temperature and humidity in each department. A little pamphlet which a paper manufacturer put out a year or two ago says that the temperature should be maintained at 75 to 78 degrees F. and the relative humidity at 55 per cent. I am not certain whether this is a theoretical optimum condition or whether

all factors had been considered when they arrived at these figures.

We intend to have the experimental staff at the Mayo Clinic determine for us the optimum temperature and humidity as far as the human body is concerned, and will temper this with the optimum conditions for both letterpress and lithographic printing.

One other question which interests us in our planning is the matter of the proper light to be used. We have been using fluorescent lighting in our present building and have found it to be satisfactory. Does this conclusion jibe with the information you have in hand?

THE ANSWER

● Each printer should ascertain the relative humidity suitable for his location. There can be no normal humidity for both New York City and Denver; that is of minor importance compared to a standardized uniform humidity in the individual plant. Every printer may determine with hygrometer readings, together with printing and folding tests, the degree of humidity that affords the best working conditions.

It should be as closely as possible maintained throughout the year and especially during the period of artificial heating when the pressrooms, stockrooms, and binderies ordinarily are too dry. In the sections of this country where most printing is produced the supra-dry atmosphere in workrooms prevails from the middle of September to the middle of June, or to put it another way, during the winter roller season.

In both printing and lithograph industries a number of large, forward-looking plants have had complete air-conditioning equipment for a third of a century with satisfactory results.

From the production viewpoint, air-conditioning's functions consist of reproducing in those parts of the plant where conditions of humidity, temperature, cleanliness, and circulation of air affect materials and processes, the natural atmospheric conditions that printers have found yield the best results through long experience, so controlling regain of moisture by paper and composition rollers, humidity high enough not to favor the generation of static

electricity and low enough to avoid waterlogging of composition rollers and paper, temperature for which printing ink is made to be used and composition rollers, and also, the approximate elimination of floating dust and, not the least important, maintenance of comfortable working conditions.

Regain of Paper Varies

One of the printer's real problems is the regain of moisture by paper and control is assured by maintaining in all parts of the plant where paper is used or stored a fixed relative humidity. Temperature has a negligible effect on paper, but its moisture content is an ever present function of the relative humidity of the surrounding atmosphere, with the quantity of equilibrium moisture content varying with different kinds of paper such as antique, M. F., S. and S. C., and coated.

The variation in the regain of paper with varying relative humidities is of supreme importance in high grade printing and lithography. The moisture content of paper affects its size and its caliper. The amount of stretch or shrinkage varies with different papers. On a 44- by 64-inch sheet, register is impossible if humidity changes more than 2 per cent during production, and 5 per cent is the limit of tolerance on smaller sheets. This has to do with changes in sheet size as they affect register.

Register is also endangered by wavy and curly edges of sheets of paper. The center of a high pile of paper is under greater pressure than

the edges, so moist air enters the edges first and the interstices and the fibers swell. The greater central pressure prevents the sheet from stretching uniformly and the stretch shows in waves at the edges, which makes accurate feeding to register difficult and often impossible.

Curly edges are caused when air that is drier than the paper enters the edges and draws moisture from interstices and fibers to effect an equilibrium. Curly and wavy edges both are unfavorable to register.

Paper troubles in winter may be caused either by extreme dryness or by low and radical changes of temperature. If paper is printed before it has adjusted itself to pressroom humidity it is likely to shrink. Curling from same cause is also likely to occur. If paper is brought from a cold storeroom into a warm, dry pressroom, trouble with static may be expected. Trouble with surface cracks in folding may be encountered when the paper has been in a warm, dry pressroom several days and also exposed to the flames of sheet heaters. These same troubles could be present during a prolonged warm, dry spell in summer.

Extreme Moisture Troublesome

Extreme moisture causes paper trouble in the damp days of spring and sultry spells of summer. During these seasons sudden changes down or up in the relative humidity often cause register trouble. Both stretching and shrinking of the sheet may occur from day to day or in a single day from abrupt changes

of humidity. Wavy edges may be expected when paper is at once taken from a newly arrived container, if very high relative humidity prevails in the pressroom.

As insurance against static, constant relative humidity of at least 55 per cent is recommended. In addition to high relative humidity, the circulation of moist air must be constant else a dead layer will form around the press. These precautions leave static eliminators out of consideration. If the best of these devices is employed it may be depended upon to remove the slight static that would occur with relative humidity of from 35 to 40 per cent, and this arrangement might prove entirely satisfactory and in some cases more economical than maintaining higher humidity.

Moisture Affects Drying

Printing inks of the oil-varnish type are only very slightly affected directly by extremes of relative humidity. For instance, the drying of a moisture absorbent pigment like the most important, carbon black, would be retarded by moisture. All of the less stable vehicles such as those of anilin inks, for example, are directly affected by extremes of humidity.

All printing inks are indirectly affected by the moisture content of paper which has so much to do with absorbency, often called the printing quality of the paper. Excessively moist paper, of course, retards drying since if the interstices and fibers

Perforating with Rule

To save wear and tear on the rollers when perforating rule is being used, make the job ready as usual with type high rule. When the job is ready to go, glue a strip of buckram to the tympan along the perforation. The last impression will be as clean as the first.

are already charged with water, there is no room left for the ink vehicle and it cannot be absorbed.

Temperature directly affects inks, which are calculated in formula for an average temperature of 70 degrees F. A change of ten degrees practically makes another ink, in body, flow, viscosity and drying rate. And of course both temperature and humidity directly affect the drying rate of inks, by both absorption and oxidation.

Glues and pastes used in the bindery and pressroom are affected by both the temperature and humidity changes, and composition rollers are highly susceptible to these changes, if extreme. The glycerin may ooze out and the roller becomes distorted or it may swell, shrink, or crack, or become so waterlogged as to lose its supremely important tack. Happily, rollers may be made to function at any given condition of temperature and humidity, provided it is fixed. The same is true of printing inks, so these both constitute an argument in favor of fixed relative humidity.

In view of the facts that any fixed point must be a compromise between different requirements and that it is wasteful to spend more than needed for the best equipment, it is reasonable then to state that a complete air-conditioning system for either a letterpress or lithographic plant should maintain a fixed relative humidity between 50 and 65 per cent during the summer and between 40 and 50 per cent during the winter, and a temperature of from 70 to 80 degrees F.

Good Air is Vital

As for the most salutary atmosphere for the worker, you will find that the medical profession is fairly well in agreement that it will be found in the atmosphere outlined in the preceding paragraph as most suitable for the most important of the materials used in the printing industry. Those who work in air-conditioned plants get a lift from the air that definitely is a contributing factor to better production. It should never be forgotten that the quality of the air we breathe is even more important to health than food and drink.

Fluorescent lighting is steadily gaining in favor and deserves it.

In order to get a complete picture of air-conditioning and lighting, so important both for worker and production, we suggest that you consult with the concerns listed under these heads in *THE INLAND PRINTER* directory of firms supplying the industry in the December, 1945, issue.

NO. 29 OF A SERIES OF TOPFLIGHT CRAFTSMEN

Edward A. Aitken

★ His hobby as well as his bread and butter is the printing business. That's Edward A. Aitken, pressroom superintendent of The Bryant Press, Toronto, who boasts of never having had a cold or headache in his life, which makes believable his claim of never having lost a day because of illness in thirty-six years.

President of the Toronto Club of Printing House Craftsmen in 1938, and district representative for the third district in 1940, Ed always takes an active part in all International conventions, and has conducted pressroom and production clinics in Baltimore, Ottawa, Buffalo, and Toronto. A popular extemporaneous speaker, he has addressed

numerous printing groups. Articles he authored have appeared in Canadian and American printing magazines.

Ed's parents were North of Ireland folk, but he was born in Toronto. He received his education at public schools, night schools, and wherever an opportunity of learning was available.

Aside from the bread and butter "hobby" of printing, he likes to relax by walking, swimming, or fishing. He admits that in his past he has organized several fife and drum corps.

The Bryant Press pressroom over which Craftsman Ed Aitken presides specializes in book work and four-color letterpress printing.



**PRESSROOM SUPERINTENDENT
BRYANT PRESS LTD., TORONTO**

THE INLAND PRINTER for April, 1946



Offset

Coated Papers and the Offset Process

By R. Ernest Beadie

● **OFFSET** HAS achieved its creditable position in the major reproductive processes through the intelligent research, better machinery, and careful techniques for creating printing of high standard, which admittedly challenges the best of craftsmen to distinguish offset reproduction from the finest of typographically executed printing—and on coated paper, an accomplishment which not so many years ago was deemed possible only by letterpress.

Because of this, as well as the fact that a yearly gross volume production of \$300,000,000 is claimed, with every expectation of an increase to approximately \$500,000,000, the country's papermakers are concentrating on providing coated papers which can be processed as successfully by offset plants as the same type of paper has for years been handled by letterpress houses.

Offset Now Precise Method

Attaining high quality reproduction on coated paper by the offset process has contributed in no small way to the increasing demand for color on the part of large purchasers of advertising and general commercial printed items such as labels, wraps, containers, cartons, and folding boxes. Offset lithography today has progressed from a process primarily associated with the idea of economy on long runs, with high-speed delivery on any paper, to a precise method of reproduction equally satisfactory for short or long runs in one or multi-color, which definitely produces the top quality type of color work as well. In some instances, markedly the label and package field, the offset process has expanded into the position of undisputed leader as far as volume of work is concerned. The process has gained a position of complete acceptance of its product by the purchasers of printing.

Coated paper for the reproductive processes came into existence because of an urgent and broad need for such a type of sheet, with a maximum of ink-receptivity together with as nearly perfect as possible planographic surface, and a high finish to impart brightness and reflective qualities which would enhance the appearance of the brilliant four-color process and single-color (black) halftone inks used in the letterpress method of printing. Until just a few years ago it was considered impossible for the offset houses to utilize this type of

paper successfully in their method of reproduction.

The belief was well-founded, for it is impossible to use with any degree of success on the offset press the same coated paper which has been specifically fabricated for letterpress printing. Very little consideration need be given the ingredients employed to attain brilliance and smooth surface on coated paper for letterpress with regard to the chemical reaction inherent in them, because no condition in the letterpress method is conducive to such chemical reaction.

However, in the offset process an entirely different set of circumstances creates the necessity for considering the hardening agents as well as the clay (or other substances) used in the coating itself. In many instances the coating material is calcium carbonate, a very white, opaque, and inert material which prints exceptionally well by letterpress and possesses fast ink setting and drying properties.

Calcium Carbonate Coating

Unfortunately for offset printing, calcium carbonate is both water soluble and alkaline. This precludes the possibility of this type of coated sheet being used in jobs which are dual processed (letterpress and offset on the same sheet). Owing to the reaction which would develop, the image on the plate might be attacked to such an extent as to be entirely destroyed; non-printing areas would tend to become ink-receptive, and the sheets show a film of scum where they were meant to be clear white.

Calcium carbonate coating has very little receptivity for the inks used in offset printing. In selecting a coated paper (it is often designated as "Offset Enamel"), should there be any suspicion that the percentage of calcium carbonate is

Of timely interest

in connection with this month's subject matter is the account published on page 70 in the March issue of *THE INLAND PRINTER*, describing briefly a reproduction innovation in an Eastern city newspaper plant.

This particular paper had, just prior to the war, obtained delivery of a specially built web offset press for high speed multi-color printing on both sides of the web simultaneously. The web passes from printing unit to printing unit without compensatory rollers contacting its surface, thus eliminating the hazard of smearing the ink.

The original idea had been to employ the press solely for printing on newsprint. However, the owners decided to attempt the production of commercial color work which would frequently involve the use of coated offset paper.

As a result of close cooperation of the newspaper's technical staff, the research staffs of the ink and paper makers, and collaboration on the part of blanket and roller makers, plus specially built drying equipment, speed printing on the smooth-surfaced paper has been satisfactorily accomplished. The type of inks that were used required special blankets and rollers.

Indications point to the feasibility of four-color offset reproduction on both sides of the web, on a variety of paper stocks, at press speeds of from 12,000 to 15,000 cylinder revolutions per hour.

close to the danger point, a simple test can be made. A weak solution of hydrochloric acid is employed for such testing (15 per cent will suffice). Place a drop of the solution on the surface of the stock; if bubbles appear one may judge from the rapidity of their formation just what the hazards of using such a sheet will be.

Formation of bubbles indicates the presence of calcium carbonate in the coating. Rapidity of formation shows in what proportion it is present. If the bubbles form rapidly and copiously—in short, if the reaction is violent—it would be wise not to attempt to use the stock. It should, however, be noted here that calcium carbonate in small volume is often present in what are termed Litho Coated papers. As stated previously, due to its properties of speeding up the drying of the ink film, and provided no high percentage is present, it is not detrimental to the process.

Moisture Always a Factor

Moisture is always a factor in offset reproduction. Sometimes due to the nature of an ink or structure of printing areas on the metal plate, this moisture is necessarily on the acid side. The pH value of the damping fountain solution can safely range between 3.2 and 4.2 readings (although the former is considerably acid in nature and should be used sparingly). This fountain solution is transferred to the surface of the plate through the medium of the damping unit. This unit consists of five rollers. The two rollers which contact the plate are covered with a fabric; these two actually roll the moisture onto the plate as a film rather than a fluid.

In normal operation of the press this film of moisture is renewed each time the cylinders make a revolution. A certain percentage of the moisture works up into the inking form rollers when they pass over the plate, but some of it remains and is transferred to the rubber blanket, in the non-printing areas, each time the cylinders revolve. Ultimately this moisture contacts the surface of the stock, so it must be apparent why a coating with the minimum susceptibility to moisture should be employed.

Fountain solutions which attack the coated surface of the paper will also attack the driers and the fatty acids in the ink, breaking down the homogenous nature of that mixture to an extent that good distribution and depositing are impossible.

There is a type of letterpress coated paper which may be safely employed for short runs on the offset press, a 100 per cent clay coated with a casein or starch adhesive binder. It should be borne in mind, however, that this sheet does not possess the waterproof characteristics necessary to the offset method of reproduction and for this reason, the margin of safety as regards contamination is very small.

In long runs a paper which has a coating suitable for offset should be used. Such a sheet is procurable from the coated paper manufacturers, and it is waterproofed during the process of manufacture to give it the property of adequate resistance to the moisture film on the rubber blankets.

This offset enamel type of coated paper has been specifically designed to withstand the stresses which are inherent in the process. Because of its smoothness and the uniform receptivity of the coating to ink, it affords the best possible chance for sharp, clear, and faithful reproduction. This, of course, also depends on the condition of the rubber blanket, which must be at peak efficiency if best reproduction is to be realized.

Offset Speeds Are Higher

In regard to the stresses to which a sheet of paper is subjected during the offset method of printing, it should be remembered that being a rotary process, speeds are higher than in printing by the direct method on the regulation cylinder presses, be they single or two-color models. Pressure is exerted uniformly all over the sheet in offset print-



Three cardinal attributes of a successful printing salesman were recommended to the Associated Printing Salesmen of New York by Fred W. Hoch. These are

OBSERVATION . . .

or awareness of all conditions contributing to a customer's printing needs;

CONCENTRATION . . .

or the ability to dig into a customer's problems and come up with constructive ideas for their solution;

PRESENTATION . . .

the persuasive citing of all facts, to support asking for an order in terms of benefits to the buyer.



ing, so close contact with the rubber blanket is involved. Unless this blanket is kept in the condition most conducive to good receptivity and transfer of the ink film from the plate to the paper, undue strains will be placed on the surface of the sheet. This is particularly true if the rubber blanket has been neglected to the extent that it has become excessively tacky, in which event the coated paper will in all probability be held so tenaciously that the delivery grippers will be unable to separate the two surfaces. This results in most of the coating being left on the rubber blanket, or the entire sheet may tear out from the delivery grippers and remain on the rubber blanket.

Blankets Demand Attention

Offset rubber blankets, performing so important a function in the process, demand a large amount of attention. Understanding of their characteristics is vitally necessary. The surfaces of such blankets begin to oxidize or harden the moment they become a finished commodity and will persist in oxidizing as long as they remain in use. This oxidation affects both the life and usefulness of the blanket. Oxidation kills the resiliency which it possessed when fabricated, thus hardening the surface, which impairs its ink-receptive as well as its transfer properties.

To overcome this oxidation it is necessary to give the blanket a fresh surface by means of a blanket wash and a suitable abrasive material. Great care must be exercised in the selection and use of blanket washes for some solvents are detrimental to the ingredients of which the blanket is made. Once a blanket has been attacked by a solvent that breaks down its structure, it immediately becomes sticky or tacky and no amount of soapstone (french chalk) and sulphur powder will overcome the condition.

During the press operations the ink vehicle is gradually absorbed by the rubber coating of the offset blanket under the image. Washing the blanket with an ink solvent results in distributing over the entire surface of the blanket a solution of the ink, part of which is absorbed by the rubber. The solvent then evaporates, leaving a residue of the ink on the surface of the blanket. The concentration of this residue is appreciable. Tackiness is due to the formation of a sticky plastic product, as a result of the simultaneous oxidation of this residue and the rubber of the blanket.



For twenty years we have "specialized" in Printing for the Hotel Industry. We are highly trained in the Hotel Manager's language and can speak it fluently, whether conventional, slang or profane.

When a call comes over the telephone for Safety Deposit Envelopes, Room Rack Cards, Maid Signs, or any one of hundreds of items used by the average Hotel, we immediately recognize the item and can give complete information.

It not only pays in money saved, but also in time saved, to deal with a printer who knows the Why, What, Where, When and How of your Industry.

Illustrated on this page are a few of the printed pieces we have produced for Cleveland Hotels. We invite all Hotels, large or small, to make use of our experience.

Printers...

TO THE HOTEL INDUSTRY



Inside spread of four-page house-organ issued by Bebout & Downs, Incorporated, of Cleveland, Ohio. Original printed in black and red on India tint, the red being a screen tint with solid outline in irregular shaped panel at upper left

It should therefore be obvious that maintenance of the offset rubber blanket's maximum surface reproduction properties is of the highest importance.

In selecting coated paper for this process be careful to specify a product which has been physically and chemically prepared especially for it. While it is true that the film of ink deposited on the paper by the offset method is comparatively thin, thus reducing considerably the hazard of show-through, the factor of body strength must not be overlooked. For this reason it is advocated that a relatively heavy paper be used. Of course this is something which is mostly within the province of the customer, but if he be made familiar with the conditions confronting offset pressmen, very little reasoning should be required in order to carry the point.

In the processing of coated paper, regardless of the method involved, there are certain pressroom problems which cannot be overlooked. Coated paper, particularly if it be

coated on both sides, has considerable tendency toward static in the cooler seasons. This is because its mass in the pile is more compact, due to its smoothness which reduces the number of air pockets such as are found in uncoated or coated one-side stock.

However, the static problem is no greater in offset reproduction than that encountered by the letterpress press operator who handles large sheets of coated two-side stock, and whose press deposits a heavier film of ink on the surface of each sheet than does the offset press.

Generally speaking, to successfully process coated two-side paper by the offset method requires experience and conscientious efforts. Most offset pressmen encounter little difficulty in printing paper which is coated on one side only. Therefore, it seems reasonable that if sufficient care is exercised, they can accustom themselves just as

efficiently to the processing and handling of paper which is coated on both sides.

Coated paper, be it a one-side or two-side product, is usually employed for the reproduction of quadri-color or single-color half-tone subjects. To obtain a clear reproduction with plenty of "snap" and the brilliance of such halftones, the ink must be sufficiently "short" to leave clean opaque imprints of the individual dots and at the same time "long" or tacky enough to prevent clouding of the middletones. Too soft an ink must be avoided. Light roller settings are in order because if too much pressure is used, the pigment will separate from the vehicle and a weakened tonal strength will result in the half- or middle-tones, while the solid areas will show a decidedly mottled effect.

Too much modification of the ink, especially with reducers or extenders, should be avoided. Inks, if properly formulated by a reputable inkmaker specifically for use with

off-set coated stock will give best results if run as received, plus the addition of one-quarter to one-half ounce each of paste and cobalt driers for each pound.

It is a fallacy to believe that normal press speeds are not practical for coated papers. With ink, pressures, fountain solution, and roller settings all at optimum, and the proper type of coated paper, normal press speeds can be maintained. On very good authority it has been stated that a speed of 4,000 impressions per hour has been consistently maintained on a coated two-side paper, using semi-gloss ink, on a four-color offset press.

One of the country's well known makers of paper, whose name and trademark are familiar to both the letterpress and offset groups, has for the past few years been carrying on an attention-commanding campaign of advertising in which striking examples of four-color offset lithography on coated paper have been prominently featured.

Seasoning Paper Essential

Here are some opinions relative to paper and prospects recently expressed by graphic arts personnel: "Pre-conditioning or departmental seasoning of any stock before processing is commenced will enable the press operator to turn out a more creditable job, by reason of the better performance of paper whether or not the pressroom is air-conditioned. Of course, it is reasonably certain that seasoned stock (stock which has been permitted to arrive at department atmospheric equilibrium), in a pressroom which has controlled humidity conditions, will give a maximum production performance with the absolute minimum of interruption in feeding and forwarding, not to mention a drastic reduction in spoiled sheets."

"Paper for the offset lithographic method of reproduction has undergone tremendous improvement in the past few years. Research by the manufacturers of paper, especially during the war years, indicates the postwar use of new raw materials and better manufacturing processes. With the additional knowledge the papermakers have today, the enameled offset paper of the future will have everything that up until now (July 1945) has only been incorporated in paper for letterpress reproduction.

"One thing is certain, when we get back to what was once nonchalantly referred to as 'normalcy,' we'll have finer coated paper than was ever before possible."

Here is How the 48 States Stand in the Use of Commercial Printing Papers

SOME INTERESTING FIGURES showing the respective position of each of the 48 states from the standpoint of the use of paper have recently been issued in the form of a special report by the Bureau of Census of the Department of Commerce. The figures given are for the year 1941, and they are based upon statistics compiled from data supplied by printers in response to Limitation Order L241 of War Production Board.

The report states that provisions of the limitation order included a relatively small portion of the printing industry, the following items having been specifically excluded: newspapers, magazines, books, greeting cards, stationery, envelopes, displays, wallpaper, tags, tabulating cards, pamphlets and also all printing that was performed "for any division of a municipal, state or federal government."

The items covered were posters, calendars, direct mail, labels, box wraps, shopping news, other free distribution newspapers, catalogs, letterheads, business forms, business cards, directories, tickets, programs, and menus. The suggestion has been made that "all conclusions drawn from the information contained in this report should be tempered by these limitations."

While the addition of the items excluded would make some change in the figures, it is open to question whether the difference would be sufficient to make any appreciable change in the standing of the states.

In requesting figures for the survey, the WPB sent blanks to 37,551 establishments known to have printing equipment. A total of 31,392 reports were returned. Of this number 8,021 indicated that they used 5 tons or more of paper in 1941; 14,551 showed that they used less than 5 tons; 6,616 indicated that they were not commercial printers under L241; 2,204 reported that they were out of business; and 6,159 blanks were not answered.

Reports of large concerns which were not returned were obtained by personal visits of field investigators.

Amount of paper used by 9,173 printers, each using 5 tons and over, aggregated 1,400,996 tons. This was broken down as follows: 28 plants using 5,000 tons and over, totaled 330,104 tons; 427 plants using 500 to 5,000 tons, totaled 554,375 tons; 447 plants using 250 to 500 tons, totaled 161,386 tons; 2,186 plants using 50 to 250 tons, totaled 241,864 tons; 1,634 plants using 25 to 50 tons, totaled 57,152 tons; 4,451 plants using 5 to 25 tons, totaled 56,115 tons.

In the breakdown of statistics showing usage of paper by states:

Illinois topped all records with a showing of 996 plants using a total of 352,826 tons.

New York (state) is second with a record of 1,383 plants using a total of 239,769 tons.

Ohio is third, with 656 plants using 119,711 tons.

The relative standing of other states follows:

4. California: 738 plants, 111,149 tons.
 5. New Jersey: 242 plants, 71,350 tons.
 6. Pennsylvania: 632 plants, 71,136 tons.
 7. Michigan: 416 plants, 65,032 tons.
 8. Massachusetts: 399 plants, 56,647 tons.
 9. Missouri: 335 plants, 41,339 tons.
 10. Minnesota: 238 plants, 35,461 tons.
 11. Maryland and District of Columbia: 201 plants, 34,928 tons.
 12. Wisconsin: 290 plants, 29,294 tons.
 13. Indiana: 291 plants, 19,721 tons.
 14. Connecticut: 180 plants, 18,052 tons.
 15. Texas: 302 plants, 15,193 tons.
 16. Kansas: 98 plants, 10,721 tons.
 17. Georgia: 111 plants, 10,228 tons.
 18. Tennessee: 118 plants, 9,381 tons.
 19. Virginia: 87 plants, 7,986 tons.
 20. Iowa: 144 plants, 7,543 tons.
 21. Washington: 122 plants, 7,422 tons.
 22. Kentucky: 96 plants, 6,848 tons.
 23. Nebraska: 91 plants, 6,547 tons.
 24. Colorado: 84 plants, 5,863 tons.
 25. North Carolina: 95 plants, 5,557 tons.
 26. Rhode Island: 48 plants, 5,019 tons.
 27. Louisiana: 82 plants, 4,951 tons.
 28. Oregon: 89 plants, 4,417 tons.
 29. Florida: 86 plants, 3,933 tons.
 30. Oklahoma: 86 plants, 3,800 tons.
 31. New Hampshire: 33 plants, 3,548 tons.
 32. Arkansas: 34 plants, 2,325 tons.
 33. Alabama: 52 plants, 2,134 tons.
 34. West Virginia: 45 plants, 2,024 tons.
 35. Utah and Nevada: 37 plants, 1,431 tons.
 36. Delaware: 13 plants, 1,128 tons.
 37. Mississippi: 41 plants, 1,105 tons.
 38. South Carolina: 30 plants, 936 tons.
 39. Vermont: 19 plants, 918 tons.
 40. Maine: 34 plants, 762 tons.
 41. Idaho: 15 plants, 542 tons.
 42. Montana: 19 plants, 492 tons.
 43. North Dakota: 16 plants, 444 tons.
 44. Arizona: 11 plants, 373 tons.
 45. New Mexico: 9 plants, 312 tons.
 46. South Dakota: 17 plants, 249 tons.
 47. Wyoming: 5 plants, 108 tons.
- Only plants which used five tons or more of paper each for commercial work within the limits stated at the beginning of the record, were counted. Alaska and Hawaii were combined, they having seven plants reporting the use of 314 tons of paper in 1941.

By EDWARD N. TEALL

The editor of this department welcomes proofreading questions to be answered in this column, but personal replies to queries cannot be made by mail

THE PROOFROOM

HER'S? NEVER!

Are "her's," "their's," "it's" ever correct?—*Illinois*.

There's a catch in this. "Her's" and "their's" are never correct; "it's" is a contraction of "it is." The possessive form of the pronoun "it" is, however, always and only "its," without an apostrophe.

TWICE OVER

I am told that every proof should be gone through once, and that's all. I feel safer when I give it a first skim, then a careful, letter-by-letter reading. Is that wasteful of time?

To me, it seems well worth while to run through a galley once for sense and again for type. Dawdling is bad—and so is too much haste. Be careful with your employer's time—but not stingy. Whatever increases your percentage of accuracy is good. The light reading, for sense, helps in the spotting of outs, for example, and in detection of treacherous homonyms, like *their* for *there* and such foolishnesses and booby traps. In the more mechanical close reading, there is danger of passing a wrong word, if it is a real word, correctly spelled. It boils down to a matter of meeting two separate dangers two ways.

THANK GOD FOR FRIENDS LIKE THIS?

You have helped me out occasionally, and your SOS on page 35 of the November INLAND gives me a chance to reciprocate, even though I am a bit late in doing so.—On more than one occasion I have used three sans serif "I's" with script and similar letters. Only recently I had a line of Bernard Tango which required Roman numerals after the name. My sans serif caps were too tall, the lower-case "l" was too thin—so I used three figure "1's" with good results. With a script like the Kauffmans I would use sans serif caps, but with a script with light and heavy elements I would not hesitate to use a letter with serifs; but the main thing is to select a letter whose weight corresponds with the script.

This is one of those letters which revive our somewhat drooping faith in our lifelong belief that GOOD THINGS CAN HAPPEN. We of *Proofroom* do have our discouraging moments—not so much because

of the difficulties of grammar and syntax as because of the difficulties of human nature. Here we have the spirit of true friendship and cooperation; the genuine, underlying spirit of *Proofroom*: the Spirit of Helpfulness. To you, sir, both for the spirit and for the substance of your reply, many thanks. What you have to say will be helpful to many a so-called "small" printer. (These, I think, constitute one of America's strong bulwarks against the forces of the breaker-uppers.) Weight-correspondence seems to be the key—as our original note pointed out.

NO ARGUMENT ON THIS ONE!

Is "between 4 and 5,000" okay, or bad?

It is okay if you mean it—that is, if the difference is 4,996. If you mean "between 4,000 and 5,000," see that it is written and printed that way. In speaking, it isn't necessary to be so particular—though at that, it's safer.



How Long Did You Know Your Wife?

Did you just happen to see her on the street, walk up to her, ask her to marry you, call the minister and consummate the entire deal right there on the spot? Perhaps not. It probably took a lot of calls, many evenings spent on the family davenport, candy, theatre tickets, flowers, before you closed *that deal*.

Still, away from the romantically lighted living room, you expect to meet a prospect, through the mail or in the columns of a publication, ask for an order and change an uninterested prospect into an interested customer, right on the spot. And if it doesn't happen like that you blame the advertising or the salesman.

You're the one to blame, for not knowing better. You've got to woo prospects exactly like you wooed your wife. You've got to call on them often (either through the printed word or flesh and blood salesman) and do the nice thing over a period of time.

A MINUTE MESSAGE BY ORVILLE E. REED



CARVE CAREFULLY!

How would you recommend dividing Spanish "conspirar"?

The University of Chicago Press *Manual of Style* says, "s" is always disjoined from a following consonant (in Spanish). That rule gives us "cons-pi-rar," instead of the expectable "con-spi-rar."

WHEN HYPHENS PILE UP

I had recently a situation like this:
..... self-determination

My boss, a veteran and most skillful proofreader, calls that an overload of hyphens, and spends a lot of time trying to find ways to break up such. Is it worth the time?

Well, the two hyphens are somewhat unsightly—but sometimes there is nothing to do about an imperfection except to "take it." An editor might feel free to monkey with the text, but an ordinary proofreader doesn't. Even the University of Chicago Press in its "Manual of Style" marks some of its rules with a star, to indicate that they are unbreakable, and others with a dagger, as "subordinate to the rules of good spacing." There are just two or three rules that stand immovable as Gibraltar, and one of them is: USE JUDGMENT.

HORRORS!

In big bold caps at the top of Page One in a September, 1945, issue of the *New York Times Book Review*, AN HISTORIAN AND HIS CREDO. It gave me the shivers.

Only two kinds of people would do it that way: the Cockney, who honestly says "An 'Istorian," and the overlearned university professor who thinks the more he's different from plain folks the more learned he must look. *Proofroom* is in neither of these classes. But among my clippings is this from the *Princeton Alumni Weekly*: "an unified defense command." Good Goodness: I myself prefer honest, unaffected ignorance to such high-brow, gluepotty affectation of superiority. "Unified," as necessarily pronounced, begins with a consonant sound: "yoonified." It is poles apart from "un-."

LINES PER PAGE

In reading page proofs of a book, what should be done if a page is a line too short or long? Is it ever, under any circumstances, permissible to let a page go that way?

If the proof is to go to the author, the shortage or excess should be marked for him, with instructions to delete or insert copy. In the war years, when it was often impossible to reach the author, such changes were made by the publisher's reader. There are times when it is proper to save the cost of new composition by letting two opposite pages go a line short or a line long, so that they match. Where one office would stand for that, however, another would flatly forbid it. The reader must use judgment in following the established practice of his place of employment.

MECHANICS OF LANGUAGE

I am told there is a phrase in the Satires of Juvenal, *gallinae filius albae*, meaning "son of a white hen," and that these words, no matter how you combine them, will always have exactly the same sense. Is that so?

I think so. Let's try it out. You can make these combinations:

gallinae filius albae
gallinae albae filius
filius gallinae albae
filius albae gallinae
albae gallinae filius
albae filius gallinae

What puzzles young students is that sometimes a Latin form has two senses: *albae gallinae* could mean either "of a (or the) white hen," or "white hens"; that is, it could be either genitive (possessive) singular or nominative plural. Yes, it could also be active singular "to a white hen." In English, we do it with prepositions. And in either kind of language, the proofreader's requirements are the same, summing up in the phrase, "Accuracy first, last, and all the time."

SEMICOLON HAS PERSONALITY

Please comment on this sentence: "His other works include 'The Steele Glas' (q.v.), a satire, published in 1576, 'The Droome of Doomesday,' and the posthumously published 'Tale of Hemetes, the Heremite.'"

I think this sentence refers to three books, but punctuated with a string of commas, it could easily mean that the unnamed author wrote four "other works"—one of which is not specifically named in the quoted sentence, but is merely described as "a satire published in 1576." (Actually, I take this expression as a modifier of "The Steele Glas.") If there were, as I think, only three books, a semicolon after

"1576" would have made that meaning unmistakable. The semicolon is an extremely useful mark; it interrupts the run of the words just enough to help the commas in matching the slight breaks in the meaning and hook-up as the sentence moves along. Used with care and intelligence, it certainly is one of the best little gadgets in a writer's toolbox.

WITH SOME TENTATIVITY!

Can nouns ending in *-tivity* be formed from all adjectives ending in *-ive*?

They can, but should not. Let's make a few, and see how they look: exhaustivity, vindictivity, productivity, conductivity, tentativity, lucrativity, negativity, inquisitivity, affirmativity, executivity, irrespectivity—well, that's enough to show that some such derivatives (not on account of their derivativity alone!) are barbarous, some are acceptable in an emergency, and a few are in common use. Where *-ivity* won't work, the ending *-ness* may do.

HITTING FIVE HUNDRED

"He watched his bomb strike through the smoke." "Every returning traveler and every report from Europe harp on the same thing." What's the score on these?

One strikeout, and one clean base hit. The second sentence is okay: two things *are*. The first should be recast: "Through the smoke he watched his bomb strike."

FOOTNOTES

How should footnotes be numbered—by the page, the chapter, or what? As a proofreader, I have simply followed instructions; but now I have a little job of copy editing to do, and it doesn't seem so simple as when someone else made the decisions and it was my job to see that instructions were carried out—not on a stretcher.

Ordinarily, I think, the footnotes work better by the page. In high-uppity, learned books, they may well be numbered throughout the chapter as a unit; but in ordinary work, the asterisk (star), dagger, double star, and double dagger are enough—and better.

BIBLE SPELLINGS

What about such spellings in the Bible as "spue" for "spew"; "plaister" for "plaster"; "cuckow" for "cuckoo"; "morter" for "mortar"; "bason" for "basin"; "rie" for "rye"; "asswage" for "assuage"; "vail" for "veil"?

Only that these are the standard spellings of King James' time, and have been kept in standard (Oxford and Cambridge) editions of the Scriptures. There are many strange expressions in the Old Book, as "lien" for "lain," "lade" for "load," "drave" for "drove," and "ouches" (equals brooches) of gold; "leasing" (telling lies), and so on. Bible English, they say, is still spoken by the mountain folk of Old Kaintuck; and I still hear people in and about New York say "If I had knowen," "half grownen," and all the likes of that.

CALENDAR FOR 1901

Season's Greetings

from (11) to (16)

APRIL

MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

New York Agency Sends Out a Different Calendar

The Irving Davis Company distributed to its clients and friends a calendar for 1901 with this explanation: "Because of the continued paper shortage, this 1901 calendar can serve for the New Year, since calendars for 1901 and 1946 are the same. Let us hope that 1946 ushers in an era of plenty for all, and that none need save the 1901 calendar for 1957, 1963, 1974, 1985, or 1991 when it will again be in order."

The calendar was made up of three leaves, four months to a leaf, and a cover colorfully printed with appropriate greetings, a selling message, and the firm name.

This clever idea is one which advertisers can take advantage of in 1947 by using the calendar for 1941, which incidentally was used in 1755, 1800, and 19 other years since the "new style" calendar was adopted in 1752.

Is Management as Blind as Labor?

By John W. DeVine

● MANAGEMENT is faced today with one of the greatest problems of its history—how to satisfy labor. Millions of words are being written on the subject, but even the Government with its fact-finding boards has been unable to obtain harmonious solution. Most of the articles today deal with the problem mainly from the side of management; yet there is another side, one rarely mentioned but just as pertinent to the solution of the problem—the side of labor.

Increased wages mean increased prices. Not even labor denies that statement. But hasn't management already increased prices to where labor is forced to demand more? Ask yourself that question; take a paper from your files of 1941, and compare the advertisements with prices of today, then answer the question yourself.

One as Blind as the Other

During the past three months, as secretary of our union, I have been in a position to observe the antics of both management and labor concerning the wage scale, and I have come to the conclusion that one is just as blind as the other—or at least refuses to look at the other's side of the question.

Our wage scale is not due for argument or "opening of the contract" until April 1, and our contract provides for 15 days' arbitration. However, in December, a couple of us decided we would attempt to "sell" our management on the idea of "volunteering" a raise.

To sell any article takes preparation. We spent two weeks drawing up our data. We checked the company's payroll for its operators and floormen during the past year; we determined the overtime paid; we figured how many men could have been hired at the regular 37½-hour week scale, and how much our salaries could have been increased without any additional cost to the company.

All this data was carefully assembled, and we spent three nights typing it—12 pages, single-spaced—setting forth all the reasons the company would benefit by volunteering a raise.

Our figures disclosed that during the past 12 months our plant—a small one, by the way, employing 42 floormen and operators—had paid

There is very definitely a great need at this time for a better and more enlightened understanding of the problems of both management and labor. There is much to be said for both sides. Recriminatory arguments and discussions will not and cannot produce satisfactory results or make for lasting progress. This article presents one side, that of labor. It brings out viewpoints we do not recall seeing presented heretofore. What is the answer of management? Hoping it may lead to a clearer understanding, we are printing this article and hope to have the viewpoint of management for presentation in an early issue.

out overtime in excess of \$71,000! And this on a scale of only \$1.30 per hour.

Our foremen estimated a man's efficiency was decreased from 5 to 50 per cent in overtime work, so we compromised on 25 per cent, which, from personal observation, appears a reasonable figure. We called this "money lost" as it was paid out by the company but did not yield reasonable returns. This figure would have provided jobs for seven additional men, also an increase of \$10.80 per week for each of us—and these would have totaled less than the company had paid for the past 12 months.

Present Brief Giving Facts

We presented these facts to our "bosses." We asked them to read the brief carefully, then let us meet with them and discuss it. We spent two hours convincing them they should "read" the brief. They didn't want to take the time, but they finally agreed to do so.

Three weeks later, they asked us to meet with them. They, in turn, handed us a brief of similar length, stating:

1. Additional wages would not bring more printers;
2. If they raised our wages they should raise all the other workers;
3. The scale under which we were working had been the highest in our area for the past four years, and we should be satisfied with it—even if it was low now.
4. Costs of living had nothing to do with how much we were making;
5. We were failing to fulfill our contract by not furnishing enough

printers to get the daily papers out without doing any overtime work.

6. If we would work harder we wouldn't have to put in so much overtime.

7. They'd be glad to discuss the matter further.

Needless to say, we dropped the whole question. The next month, the company put us on a five-day a week basis, increased the size of the paper, and insisted they were doing it so we would quit complaining about having to work such a great amount of overtime.

During the past twelve months, 51 printers have come and gone in our office. They came to get the overtime; they left because they "didn't want to work night and day"; because every other large city around us is paying more money.

Ask Increase and Vacation

We have appointed a scale committee and asked for a 30 per cent increase (which we do not expect to obtain) and a three weeks' vacation for all men with over five years' service, two weeks for three years' service, and one week for a year's service.

The company's reply was not quite 6 per cent increase, and a two weeks' vacation for employees who have worked five years or longer. The rest of us who have not worked the five years get no vacation.

As stated before, our paper is almost twice as large as it was during the war—and its size depends on the advertising, so the income is far above a few months ago.

We sought to impress upon the owners that we wanted to be able to offer enough to get good printers to move to our city so that we could depend upon them; that we did not want to continue depending on the "traveling printer" whose reputation every printer and manager knows. Their reply was they were not interested in obtaining "home owners," and they were satisfied just so they got the paper out.

We tried to "sell" them on the idea of a raise. We sought to use tact, to reach a reasonable agreement based on the paper's ability to pay and our ability to produce. Their answers were insults to both of our attempts. We feel we are justified in demanding 30 per cent increase and striking if we don't get that increase.

But what does either side gain with a strike? Each employee will lose from two to three weeks' income while the strike is in progress. That is going to hurt us workers and hurt us badly. Our salary scale is \$48.75 a week on the day side, and \$48.75 doesn't go far these days.

Can't Afford a Strike

Buying a home (as nearly half of us are); paying insurance to provide an income at 65; taking care of the regular household bills and groceries, I have to earn \$195 per month. That leaves nothing for entertainment, pleasure, car operation, doctor bills, and so on. It is for the bare necessities. The other boys are up against the same thing. Some of them are buying cars. Few have been able to save any money—and we can't afford a long strike.

On the other hand, neither can the office. They are going (they have told us) to attempt to produce a paper through use of engravings and typewriter reproduction. That has been tried by practically every newspaper where a strike has been called, and in not one has it proved successful.

In Florida, a newspaper sought to break its strike by changing its name, and legally discontinuing the old plant. It claimed it was a new paper in search of printers, thus was not on strike and union mem-

bers could work on it. That also is failing. The printers won't work for the paper.

Every day, from headquarters of the International Union, I receive cards listing new offices which have obtained raises. Every few weeks I receive requests for financial donations to aid a strike—and we have sent donations.

During November, December, and January, each union printer in the United States gave 1 per cent of his income to a national strike fund, and now the International aids in financing a strike, so we will not starve even if we have to stay out six months as some locals have been forced to do.

What Does the Paper Gain?

On the other hand, the newspaper can keep on operating, but instead of 30, 40, or 100 pages such as it is now putting out, it will be publishing only 10, 12, or 16 pages with an attendant decrease in revenue; violations of advertising contracts that permit a customer to cancel his own if he so desires—so what does the paper gain?

In the final analysis, the paper will sign a new contract for an increase of maybe 18 to 25 per cent; the printer will go back to work, and work another year—and that was what we wanted when we started our negotiations—and it

was what the management had intended to do all along.

I have detailed our own problem because it is typical of newspaper offices all over the country. They are all experiencing the same thing.

Wanted to Talk Things Over

Our original plan was to meet with the owners and publishers and "talk it over with them." We knew our members would be "tickled to death" if we could obtain a \$10 a week increase; they would have settled for \$7.50, and there would be no question of a strike now. The paper could be putting its entire facilities behind a move to obtain a newspaper representative of the town, which has jumped from 57,000 to 130,000 in five years.

But, no. The managers want to argue; to beat us down; to be able, I guess, to tell the directors they obtained a moral victory by refusing the full amount of the raise.

We wanted to sit down and work out our problems together. We were honest in this statement. Of the three members of our committee, two had been in business for themselves and knew something of the problems the owners were facing, but the managers have refused us this opportunity.

So, I ask again: is management as blind as labor has been accused of being?

TYPOGRAPHY
OF THE FINEST TYPE
PRODUCED BY HIGHLY
SKILLED CRAFTSMEN
WITH THE BEST, MOST
MODERN EQUIPMENT
ADVERTISING COMPOSITION
LINO TYPE * MONO TYPE
for IMMEDIATE SERVICE Phone
SUPERIOR 3678
Commercial Typographers
TWO-THIRTEEN INSTITUTE PLACE
Members of Chicago Typographers Association

HOT OR COLD... FINE TYPOGRAPHY
ALWAYS PREVAILS
THROUGHOUT OUR
MODERN PLANT.
FOR SERVICE Phone
SUPERIOR 3678
Commercial Typographers
TWO-THIRTEEN INSTITUTE PLACE
Chicago Typographers Association

MEMORANDUM
Advertisers Memo
If that copy
calls for something
SPECIAL in Eye
Appeal... phone
SUPERIOR 3678
MONO * LINO * PHOTO-ETCH PROOFS
Commercial Typographers
TWO-THIRTEEN INSTITUTE PLACE
Members of Chicago Typographers Association

modern ADVERTISING typography
* **SUPERIOR 3678**
ADVERTISING TYPOGRAPHY * PHOTO-ETCH PROOFS
Commercial Typographers
TWO-THIRTEEN INSTITUTE PLACE
Members of Chicago Typographers Association

Variety

While the combinations of types, and the arrangements of type here may leave something to be desired, one important thing which this advertiser has certainly achieved is variety. One of the tools he uses in serving his customers... variety in typesetting... he has put to work in his own interest. Continuity in the series is attained through the use of a uniform logotype.

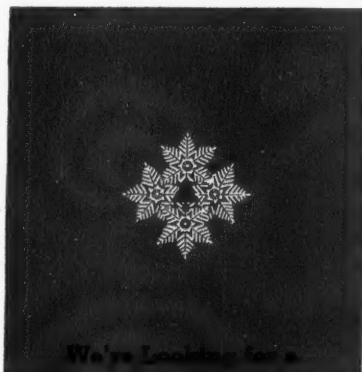
By J. L. FRAZIER

Mark for this department items on which you wish criticism. Send in flat package, not rolled. We regret that personal replies cannot be made by mail

SPECIMEN REVIEW

FREDERIC RYDER COMPANY, of Chicago, Illinois.—You have packed a lot of useful information between the pyroxylin-coated covers of your attractive new type specimen book. One-line showings of your foundry types give your customers at a glance the range of styles and the sizes which you have available. Showing blocks (not just single lines) of all sizes of body types is a commendable idea. Last but certainly not the least important feature is your type-casting chart which makes it possible to do quick and accurate copyfitting by the "character count per pica" method. This is an excellent feature.

LEONARD S. RUBENSTEIN, Niagara Falls, New York.—Wherever have you been all these years? We want more and more who have your great ability to send us their work, not with the idea that we can benefit these top-notchers particularly, though we might in some detail,



WHITE CHRISTMAS

YES... A White Christmas and all that scene symbolizes. The church bells and carols... the homecoming. A Christmas of Peace and Goodwill—Peace, with a new, world-wide significance. We're looking forward, too, to a new era of enterprise and accomplishment. In our own little world, that means simply the opportunity to enlarge and improve our service to our customers. That is enough inspiration for an organization like ours, where each customer is an individual we know, deserving the best we can give.

E. Squire Press
CORPORATION
423 FIRST AVE.
PITTSBURGH, PA.
Atlantic 5400

Simplicity and clean-cut modernism in a blotter design in blue and black on snow white



Scene of bygone days adds old time flavor to greeting of Secretary of Denver Employing Printers Association. In red and green on white stock

but for what showing of their work will do for others. The dozen or more items of promotion for Moore Business Forms, Incorporated, are remarkably well done in all respects. They are colorful and of most impressive design, sure to get interested attention and be read. We're filing what you have sent for probable future use to make a group showing. Let us see more, soon.

KURT H. VOLK, New York City.—Your expression of season's greetings, a small but beautiful book entitled "The 23rd Psalm," is something its recipients must have not only welcomed at Christmas-time but will continue to treasure as a fine keepsake. Elaborately decorated, and embellished with pure gold, the hand illumination of this edition was an ambitious undertaking. The personal touch has been amplified by the ingenious idea of starting with proofs of a "Freehand" script and joining the letters together, with pen and ink, to give the feeling of calligraphy. Profuse with color and decoration from embossed front cover to back cover, gold foil paper end leaves add still more richness to the book.

ST. PETERSBURG PRINTING COMPANY, of St. Petersburg, Florida.—We're glad to see more of your nice work. We especially admire the booklets promoting the advantages of your city as a resort. The one which is 8½ by 11 inches in size, with cover illustration in form of part of circle, is particularly well designed, numer-

ous halftone illustrations of varied shape, most of them bleeding off, being arranged in a most dramatic manner. Your presswork is excellent, most important in such brochures. Process yellow is so weak in tone it should not be used for at all delicate illustrations as appear here and there in the 9- by 6-inch St. Petersburg view booklet. Your work always interests us, so let's see more of it soon.

THE FLEURON PRESS, Cincinnati, Ohio.—The single reason that we wish the years passed more quickly is that if they did we'd see more of your great work. Writing about it is no way to fill out space for all we can say is that "it's wonderful" or something else to that effect. To examine it fills out the time most happily... is highly inspirational, too. We're unafraid to state no better printing is being done anywhere. Gruen Time and Stet, company magazines for the Gruen Watch

★ ★ ★ ★ ★ ★ ★ ★ ★ ★



GOOD IMPRESSIONS

★

DECEMBER, 1945

Volume 16 : Number 4

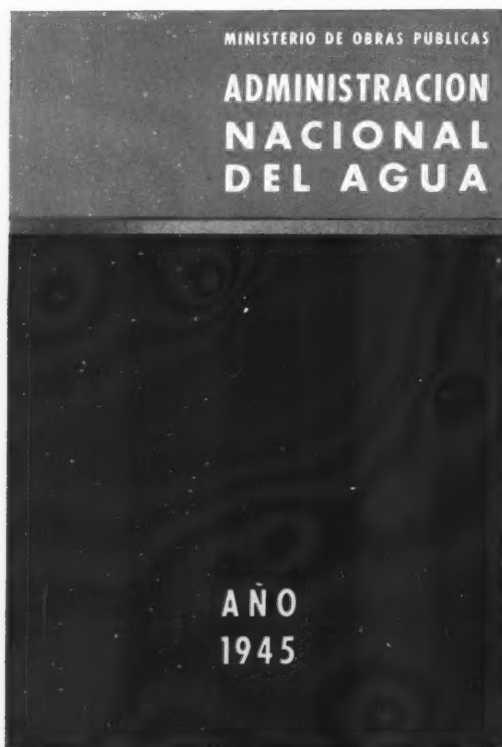
Geo. W. Grose, Editor

Compliments of

The Livingstone Press, Limited

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Interesting, colorful house magazine of British printer. Bright red and deep green on buff stock



Bold treatment has been accorded this cover design of a booklet published by a Latin American governmental agency. Massive, solid-color areas in the original were printed in red and brown

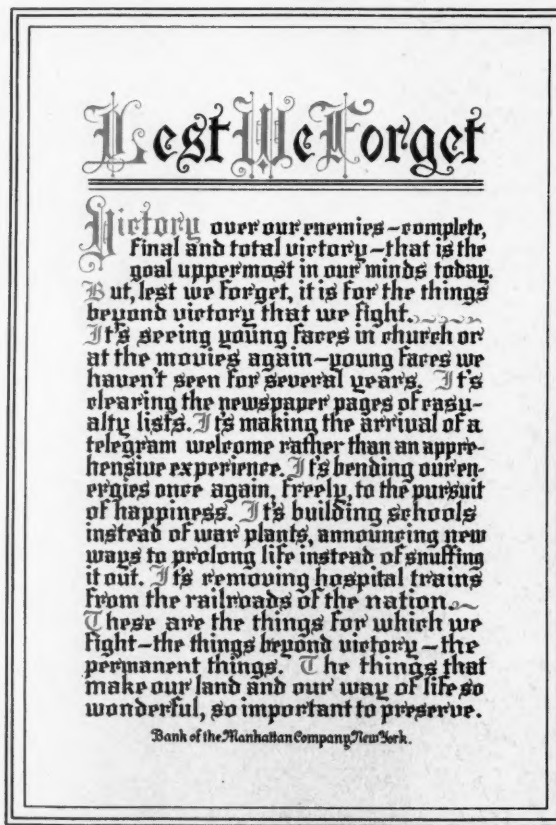


The Norman Press, of Chicago, issued this interesting as well as effective piece of printer's sales promotion . . . that all-too-often neglected silent salesman who can do a whole lot of good when properly used. Original printed in olive green and black

Company and for the Champion Paper & Fibre Company, respectively—the latter for distribution to house magazine editors—could be no finer. Our greatest thrill comes from the snap of the half-tones—the solids glisten with real blacks and highlights are “clean as a hound's tooth.”

THE STECHER-TRAUNG LITHOGRAPH CORPORATION, of San Francisco.—Top-grade example of “The Selling Power of Full Color” is your booklet by that title. The beautiful color work in it sells the effectiveness of color even without the

many will read it with difficulty, some, perhaps, pass up reading. Wherever text appears, there is ample room for the next larger type. Incidentally, the spacing between words is about three times as wide as it should be, that on the left side of “Cornerstones of Policy” being particularly bad. A more serious fault is the printing of small text over the solid blue panel of the same card. For the type to stand out the background should represent a strong contrast. Blue is nearest black of all colors. In anything near normal



Indianapolis calligrapher's rendition of text matter used in frontispiece of August issue of THE INLAND PRINTER. It is printed in red and black on white stock

explanatory copy. Center spread of 24-page and cover, 8½- by 11-inch booklet is a photograph of a Stecher-Traung full color “gang run” sheet at the delivery end of a giant 4-color press. Different types of artwork from which color reproductions can be made are shown. Letters of the “Full Color” words of the title are spectrum-colored against plain white panel on the cover, the whole set against a halftone screen printed in gray. From any angle the booklet is an inspired and inspiring piece of work.

CHARLES SCHLIFSKE, Milwaukee.—Layout and display of the two Model Railroader mailing cards are very good. They also look interesting. Text is in type so small

tone it should never be used for the panels which are to be overprinted in a dark blue as in the case here or even in black.

READ PRINTING COMPANY, New York City.—You can well be proud of the pretentious book, “Prep Charlie,” which you printed for the U.S.S. Wasp and Air Group 81. “Prep Charlie,” which is aircraft carrier nomenclature meaning “Prepare to land aircraft,” is one of the best pictorial and narrative efforts that have come out of World War II. Interesting use has been made of navy signal flags, both as a part of the rich cover design and as appropriate page decorations. Another feature is the use of end leaves, fore and aft, illustrating the Pacific war

Ideas

A good salesman is distinguished by the variety and number of sales ideas that he employs. The same features determine the real worth of your printed selling. If you seek arresting advertising to further your business aims—consult with us. We can supply new and timely sales ideas supported by good printing.

HERBERT W. SIMPSON INC.
Specialists in Direct Mail Advertising
169 SYCAMORE STREET EVANSVILLE-8 INDIANA

INGREDIENT FOR SELLING!

6541

Heavy display type and decoration printed in olive green and pink make this blotter design out of the ordinary. Balance of copy is in brown, on ivory stock

area and designating the course followed by "The Fighting Lady," U.S.S. Wasp, during her sixteen months of battle service. While the bulk of the book is printed in black with decorations in a grey-blue, occasional full-color spots—emblems of the various fighting units, dramatic pictures of the Wasp and her "brood"—further enhance this well-planned and beautifully-printed book.

WILLIAM E. RUDGE'S SONS, New York City.—"Delight at Christmas," a treatise on modern book design by that contemporary master, Merle Armitage, is a splendid way of saying "Greetings" to your friends. As you so aptly put it: "Those who agree with Armitage will find here unalloyed pleasure; those who disagree will find pepper to spice their controversies." But whether one agrees with Armitage or not, he must concede that the astounding departures from conventional ideas of design, described and pictured in this interesting book, are indeed stimulating to creative thought. One notable example is the two-page title page, with all type matter on the left-hand page and illustration on the facing page. And the severity of the text pages, set in Bodoni, surrounded by generous white space, and printed letterpress, is nicely balanced by the

soft, full-page, bled illustrations produced by gravure.

DAYTON'S TYPOGRAPHIC SERVICE, Dayton, Ohio.—Thanks, friends, for the copy of your 16-page accordion-style folder of one-line specimens of type faces. The piece is both practically and effectively designed, but the thing that impresses us most is the wide range of modern styles you are equipped to supply typesetting in for your customers. Don't get "mad" when we say that Dayton is a small city for you *know* it is when compared with New York, Chicago, *et cetera*, *et cetera* . . . but, of course, not *et cetera ad finitum*. That, friends, is the bitter part of the pill. The sugar coating—and it is real, unadulterated—is our testimony to the fact that until we are proved wrong we'll say advertisers in no city the size of Dayton have equivalent facilities at their disposal. And that means that there are many typographic shops in larger cities which cannot supply what you can. Feel better? and, thanks, again—your folder is now one of our permanent desk pieces.

THE HERSH PRINTING COMPANY, of Cleveland, Ohio.—The blotter issued to stimulate attendance at the twenty-fifth anniversary meeting of the Cleveland Club of Printing House Craftsmen is of



Modern design, and a pleasing color combination (blue, black, and ivory) combine to make this refreshing cover. It is by Charles J. Felten of New York City



This unusual house magazine cover of Composing Room, Incorporated, of New York City, was unintentionally reproduced in the February Specimen Review with the wrong color combination. In the original, symbols were in brown, title in black, on tan stock



"A Successful New Year to All"

January house magazine cover with timely illustration and color scheme. Background is cold, lead-colored blue to simulate a winter sky. White stock is used to give effect of snow covering barren limbs. Printed by the Paris Printing Company, of Kansas City

interest mainly because it was issued by an individual for the good of the cause. Facsimile of business card of the well known "Bill" Stock appears slantwise in a dull orange near the lower right-hand corner of the piece. It stands out in an interesting way because all the other copy, promotion for the meeting, appears in black on horizontal lines. Leading faults are an effect of crowding of the major part, that printed in black, and too little contrast of size between display and subordinate matter, text. Changing styles in the heading makes display "choppy" and moderately confusing. The row of three open stars beneath the two lines of the head is not required as a dash because the change from display to body is enough of a division. Omission would release space for a more prominent heading, an obvious improvement.

FREDERICK R. ASPINALL, Bolton, England.—In layout your letter-head is excellent, as is also the lettering. Your work mark in light brown in upper left corner of the form is interesting. It is followed by your name and "commercial and graphic" in a single line of contrasty scrip lettering in deep brown, the right end of which overprints part of the word "Design" in the lighter brown, this word in inch-high somewhat condensed outlined and shaded caps of monumental characteristics. Follows, below, a fine line in the light brown flush with name line indented about an inch from left-hand edge of sheet and running off sheet on the right. Telling you

THE CHARTER OF THE United Nations

*With Addresses Selected from
the Proceedings of the
UNITED NATIONS CONFERENCE
San Francisco, April-June, 1945*

WITH A FOREWORD BY
FREDERICK LEWIS ALLEN



THE HADDON CRAFTSMEN
Scranton, Pennsylvania

Formal, characterful title page design for book dealing with United Nations Conference. The work of W. Arthur Rushmore. Original printed in red and black on white antique deckle-edge paper

what you already know is something of a dodge so other readers may adapt the general idea to work of their own. Oh, the name line is raised to simulate embossing. In our opinion this doesn't help, which is not to say that the so-called thermographic process is without merit. It is really all right in the proper place.

HOWARD N. KING, York, Pennsylvania.—You have scored again with your fresh and modern handling of David McCord Wright's book "Business and the Radical Indictment," which was sent as a Christmas and New Year's greeting to friends of The Maple Press. The typography is, as could be expected, letter perfect. Body copy, hand-set in 14-point type, 4-point leaded, and in lines of a pleasing width, leaves nothing to be desired here. The unusual two-color (in light brown and blue) initials and decorative spots designed by Valenti Angelo add interest to the typographical design. But the feature most in evidence is the way you have designed the body pages with very generous areas of white space between lines and around type masses in order to make the beautiful white antique paper very much a "part of the picture." Another highlight that's specially worth mentioning is use you made of the two-page title page. This is an interesting deviation from the classic title page design, and you have made excellent use of it.

IONA PRESS, Celina, Ohio.—You should study the fundamentals of design. An appreciation of shape harmony would have stopped you

Who's Who in Intertype



WELCOME HOME FROM THE WARS

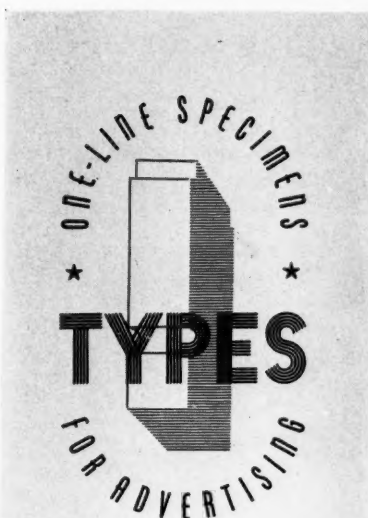
"Welcome Home" cover of Intertype Corporation's monthly house magazine. The black halftone is printed over a flesh-colored tint on a white background. The returning heroes are named at upper right below the title



Illustration symbolizing peace in the New Year makes an appropriate cover design for house magazine. Background is deep blue, branch bright green, on white stock. Magazine is for employees of the Cuneo Press, Incorporated

from using in one small piece several type styles which are so entirely unrelated in shape and characteristics of design as to result in a most unpleasing appearance. The handling of the inner pages of your greeting folder, on strong orange cover paper, is an example. A verse on page 2 is set in extended copperplate Gothic. Greeting proper at top of page 3 is in Wedding Script, signature below in condensed Old English. None of the three has anything in common with either of the other two. In view of small sizes of type the orange paper in itself would represent too deep and strong a background. You made it worse by printing ornaments in a light color to represent snow flakes all over the pages. The book which would help you most, "Modern Type Display," is out of print temporarily. If you could pick up a copy second-hand it would be a big help. Also study the work of typographers whose work is acknowledged as being top grade.

LEWIS BIEBIGHEISER, Chester, New Jersey.—Most items you submit are average, one is very bad and another remarkably fine. The bad one features a sketch in green simulating effect of postage stamp with shadows at right and bottom. Over this in black "R.F.D.2" appears in upper left-hand corner, name in a diagonal line from lower left to upper right corner, then city and state in lower right-hand corner, all type black. It would have been far better to print the name in larger type in a horizontal line extending outside the limits of the illustration. The architect's heading is one of the best we've seen. Foundation is a two-point rule twenty-seven picas long. Above on left side name appears in neat italic caps, the word "architect" in italic upper- and lower-case is above rule near right end, with address below rule near right end of rule. Type and rule are black. Now



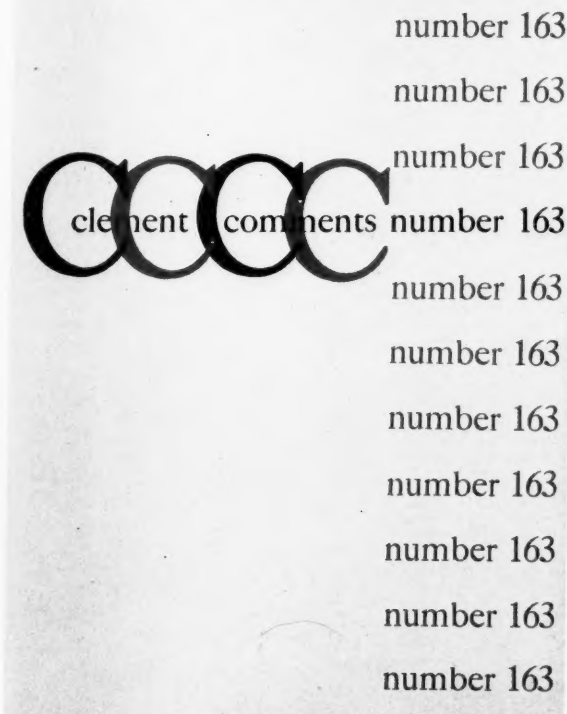
ROCHESTER TYPOGRAPHIC SERVICE, INC.
384 COURT STREET • PHONE MAIN 4243

An interesting layout and typographical design for the cover of a type specimen booklet. The symbolic illustration of a piece of type was made with simple type rules. The cover was printed in black and yellow-brown on a tan stock, a good selection

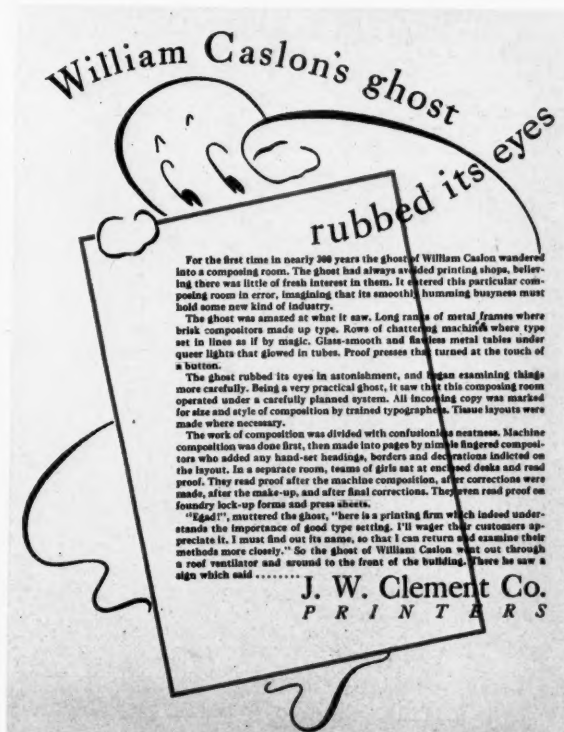
resting on rule between name and "architect" a simple sketch of a modern business building appears in green of just the right hue and shade. How could you turn out work of such widely differing merit?

JOHN F. BETHUNE, of Berkeley, California.—Cards and letterheads you send continue to impress us as among the best work on small strictly typographical jobs which comes to us. We don't like so much copy as the dinner invitation of the Community Chest carries set altogether, or virtually so, in caps. This is not because composition is unattractive in caps—and we wouldn't dispute one for claiming it is more esthetic. Our suggestion is made because composition in lower-case is more easily read. Lines and words in caps, like italics, are useful here and there for change of pace to avoid monotony, but especially to emphasize the important features of copy. Here we are, though, telling you what we feel in view of other qualities of your work you already know. Functional features are of prime importance. Letterheads of Blake & Ryan and Ross & Ross are "sweet." We'd like to see the ornament of the former in color, not only to reduce its weight and attractive force but to brighten up and add interest to the piece. The border used on the McMurray commemoration might also have been printed in color—a purple tint, say—for the same purposes and because it is somewhat too prominent for the type. We'll say this—and it is a challenge to a lot of typographers—you do a lot with just what, and only what, may be had from our American type supplying agencies.

WOODWARD PRESS, Montreal, Canada.
—Your impressive 612-page case-bound volume "Canada in World War II: Post-War Possibilities," produced for



Buffalo printer achieves an interesting cover pattern by repetition of the issue number. Medium green, dark green, and black on light green stock



Title page of house magazine using a new angle . . . Caslon's ghost . . . to tell a service story to customers. In light and dark green on white stock

William S. Boas & Company, publishers, is an excellent example of what is being done in the books-by-offset field. Best feature of the item from a technical standpoint is the good, even black color maintained throughout in the text. Good detail has been preserved in most of the halftone illustrations, although a few gray off too much. As an example of a lithographed book it is outstanding, but frankly we must criticize the choice of the process for this particular job. The illustrations would have had more snap and sparkle printed by letterpress on coated paper. More than half of the book is text—another reason for letterpress. We can see no good reason for having used offset unless copy for the illustrations came from already published sources, in which case there would be a considerable saving of expense in platemaking. However, judging from the uniformity of the illustrations, we would assume they were made from original photo prints. Criticizing the book from a design rather than a production angle, the choice of a sans-serif type face for the text, especially when there is so much text, was in our opinion an error. It could be more readable. The book would have been better without the ornamental rules or bars in color above and below the illustrations. They detract from the pictures rather than call attention to them, and crowd the page—not enough space was allowed for them between text and illustration. The red used in the bars on same pages is pleasing, but the brown on others looks weak and faded. Some of the bars are badly nicked and should have been examined more closely before the plates were made. The book was attractively bound with a purple cover stamped in gold. It is sturdily put together and reinforced with tape to stand up under long and frequent use.

THE RHODESIAN ANNUAL, of Bulawa, Rhodesia, Africa.—You have been faithful over many years in sending through your yearly number issued for Christmas distribution. Practically always a mention of them has appeared in this department. Invariably your reviewer has looked through them, read many articles. This, it would seem, testifies to interest. On occasion some rather adverse criticism has been leveled at them, but since you continue to favor us and signs of improvement are evident, it appears you sought suggestions, always a good sign. The 1945 cover is one of the best. Picture of returning soldiers being greeted by parents and friends covers entire page, name of publication and "1945" in large open letters showing the white (stock). It is highly impressive as a design, one of its attributes being simplicity. The process colors of the picture appear to have gone a bit amiss—red tends bluish, what we suspect was meant to be blue is on the green side. We're asking our pressroom expert, Mr. St. John, to analyze the picture and send you his advice. Typography of advertisements seems definitely better. Fewer styles of type are used, for one thing, and increased use of Gill Sans makes for a more modern appearance. We note still one of the old faults. Word spacing is too wide both in some ads and in most of text composition. This error is expensive of space as well as being unpleasing. In practically every line a word or syllable from next line could be brought forward, making more copy possible in the magazine as a whole. As always, the presswork seems better than composition. You use excellent paper.

EDGARD DESJARDINS - JEAN-BAPTISTE DUPRE
EDOUARD PARIZEAULT - ALEX. LAVERDURE
GEORGES CONTANT - MOISE MATHURIN
JEAN-PAUL GAUTHIER - ROGER MARCHAND
ELZEAR BLANCHARD - EMILLEN BRUNELLE
EUGENE LAVERDURE - EDUARD PAQUETTE
LUCIEN VIDICAIRE - GEORGES PELLETIER
AIME SENECHAL - ROSARIO SAINT-GERMAIN
ACHILLE MAILLOUX - CHARLES MIGNEAULT
MARCEL COLLIN
CONRAD MARTIN
LEO-PAUL BARRE
CHARLES COUTU
BERNARD NADON
FERN. COUPAL
EDG. MC GOWN
VICTOR TREMPPE
ALBERT PAYANT
CLEO POIRIER
ART. LECLAIRE
ROMEO POITRAS
ALDERIC GILBERT
GEORGES ALLAIRE
EPHREM GRENIER
PAUL LABELLE
VALM. GUERTIN
MOZ. GARIPEY
LUCIEN LABERGE
GERARD LABERGE
ANDRE LEBLANC
GERARD LEBLANC
RENE LEBLANC
ULRIC LAPORTE
GEO. MONGEAU
ROD. BELANGER
RICH. CHARRON
PHIL. QUELLETTE
ROL. CHALFOUR
LEO ROBITAILLE

GEO. LAVERDURE - E. LEVAC
LOUIS-PHILIPPE LANGLOIS
JOSEPH - ELOI GAUTHIER
L. DESROCHERS - R. LEFRANÇOIS
F. WILLE - QUEENNEVILLE
O. DAIGNEAULT - C. CASAVANT
A. VIDICAIRE - R. NORMANDIN
A. LEVESQUE - E.-A. VEILLEUX
M. BLANCHARD
R. BOURGAULT
HERVE GODIN
G.-A. MICHAUD
PAUL-F. LECLAIR
J.-GUY DESJARDINS
J.-A. NOEL COURVILLE
PHILIPPE NORMANDIN
JEAN-PAUL DESJARDINS
R. DESJARDINS - H. QUELLETTE
JEAN DUFORT - CON. DESJARDINS
MAXIMILIEN COUPAL
GERARD BERTRAND
GERARD BLANCHET
RAYMOND LEBEAU
ADOLPHE MAILLET
PHIL. DALLAIRE
GUS. CAZELAIS
PAUL RAYMOND
EUG. HAMELIN
R. DANDURAND
LOUIS MAILLOUX
JEAN FONTAINE
RENE TREMBLAY
R. ALLEY
HENRI ISABELLE - HENRI PAQUETTE
EMILE BESSETTE - AVILA LAFLEUR
JEAN-LOUIS TAILLON - ED. DOUCET
JACQUES GINGRAS - ALB. RAYMOND
J. HERCULE MARTIN - AURELE RUEL
ARTHUR-C. POTVIN - ROGER GODIN
ARTHUR - HENRI BOISSEAU
GEORGES CHARTRAND

Hommage des membres de la chapelle de "La Presse"

(LA PLUS CONSIDERABLE CHAPELLE DU LOCAL 145)

Page from souvenir book of Montreal Typographical Union. Chapel members' names form figures



from the French Magazine

Offside balance and nice use of color spots are features of this cover of the house magazine of Clark-Sprague Printing Company, of St. Louis



CLARK-SPRAGUE PRINTING CO.

Timely touch of humor adds interest to back cover of booklet shown at left. Both covers printed in lively orange and black on buff stock



The honey bee has been eulogized in poetry and prose because of his industriousness and vision to provide for the future. From this standpoint he is an example for all mankind. However, we must beg to point out that the bee uses very little business acumen. When he leaves the hive a stop is made at the first clover, lilac, apple blossom or any other flower that may come in his path. This results in a mixture of flavors in his product that many times is distasteful. Some printers work like bees setting all styles of type in the same printed piece which results in an unpleasing appearance that compares with honey made from various nectars. Here at Frye we like to believe that we are as industrious as the bee, but we do not mix type faces that will destroy the proper atmosphere of individualized printed advertising. . . something that is learned only by hard work and study. . . If you would like your advertising analyzed make use of our customer consultation service.

Frye Printing Company

The lowly bee comes in for some publicity in this red and black blotter design by Ben Wiley of Springfield, Illinois. Simplicity and plenty of white space are always distinguishing features of Ben's work

By EUGENE ST. JOHN

Questions on pressroom problems will also be answered by mail if accompanied by stamped envelope. Answers will be kept confidential if you so desire and declare

THE PRESSROOM

PAPER COIN HOLDERS

Concerning the paper coin holders as used by banks and others: can you tell me how this work is handled? Is there a machine made which will handle part of the work?

Yes, the equipment is available to print and make a great range of tubular and rounded objects, most of which equipment was born of the needs of tin can manufacturing. Several of the firms making this equipment also make equipment used in regular printing.

HOTPRESS CARBONIZING

The August and November, 1945, issues of THE INLAND PRINTER contained brief articles about spot carbonizing which are of interest to us. We are interested in equipment for spot carbonizing and for the manufacture of carbon paper by the hotpress method. Will you send us a complete list of equipment for this particular type of work?

The multiple billing specialty printing field is growing in leaps and bounds. Originally a roll-feed rotary letterpress specialty ending in a fanfold, printed from curved metal plates, this work is now printed as above, also from rubber plates, and on roll-feed flatbed machines from both metal and rubber plates, and on the sheet-feed offset presses. Some specialists in this field buy carbon paper in rolls and others coat their own on heated machines, either spot or all over as required.

PRINTING "88" CARDS

Can you tell me where I can get complete information regarding presses that will handle "88" cards? We have a terrific quantity of such jobs and the best we have been able to do is to run them 4-up on an open platen press.

You can get quite a volume of production by using the automatic sheet-feed presses, either platen or job cylinder, and by running more than 4-up. In order to get the best output of the presses it is necessary to standardize the furniture and lockup as in check printing so that each successive form of eight or sixteen cards may be dropped into the places occupied by the units of the preceding form. You must also allow in this form makeup

for space required for trimming all four sides of the single cards for a first-class job. If you are getting into this business on a large scale it would be well to consider using a hollow-die die cutting machine.

PRINTING ON 3/4-INCH WOOD

A friend of mine has an idea for a new manufactured product and he would like to know if any printing firms today are successfully printing on wood surfaces. The proposed product would be made of 3/4-inch white plywood. The board would be approximately 2 feet by 3 feet and he would like to have the printing in three or four colors. To whom may we turn for specific suggestions and prices?

You may print on wood up to this thickness on platen presses and also on special presses built for printing on wood in one or more colors.

PLASTIC PLATES AND BOTTLE CAPS

We have always confined ourselves to commercial printing and loose-leaf work but now have taken on other lines connected with our craft which give our travelers greater selling opportunities and, we hope, ourselves some added profit. We would appreciate names of manufacturers of equipment for making rubber and plastic plates, and those who make plastic novelties which we could carry at the same selling cost. We would also like to have the names of makers of equipment for bottle caps.

Some manufacturers of plastic novelties supply them to the trade and others do not. Transportation costs must be considered also. Manufacturers of plastic materials will supply names of novelty makers situated nearest you.

ROLLER WASHING MACHINE

On page 66 of your August issue you state that a successful roller washer for letterpress rollers has been built. Will you please let me know where I can get information on this machine?

This is a useful pressroom accessory, saving time, labor, rags, and detergent while doing a better job. The first roller washing machines were designed for use on offset presses and shortly after their satisfactory tryout an insistent demand arose for a similar machine for letterpress machines.

SCARCE MACHINES

For some time we have been attempting to purchase the following three printing equipment items: an automatic or semi-automatic gathering machine for collating single sheets into sets; an automatic stripping machine for the application of gummed Holland cloth tape to the binding edges of side-stitched books and padded forms; and an eyelet machine that will apply string and button fasteners as well as metal eyelets to envelopes, cards, and tags. To date we have been very unsuccessful in locating vendors for any of these machines, at any price. We thought possibly you might be able to tell us where we could obtain such equipment. Even though the machines are not yet available for delivery from a certain manufacturer, we would like to know his name so that a purchase order could be written before the termination of the fiscal year on July 1.

Under present abnormal conditions, we believe we can serve you best by supplying names of the manufacturers of several machines. They are in close touch with the market at all times and know better than any one else where you may possibly pick up machines in the near future, if there are any available.

HOMEMADE ROLLERS

As you know, in many parts of Europe the printers used to make their own rollers. Exclusive manufacturers of rollers, as in America, are almost nonexistent. We have received an inquiry from one of the most important printing establishments in Italy about the material used in the manufacture of these rollers. Will you please be so kind as to give us the names and addresses of firms who carry that kind of material and from whom we can buy a great quantity? Also we would like information as to where to obtain felt sheets for packing under the stereotype cardboard.

Well I remember making our own rollers as a lad in the great Crowell plant. It was easy and we always had the best rollers. Believe me, no one realizes the importance of a good roller like a pressman. The job was easy because we got ready-to-melt roller composition from one of the leading roller makers of the world. This is still the best source of supply because in roller making it

is the know-how of what it is all about that counts. It is possible to buy the principal raw materials from the great packing houses in Chicago, but to combine these into the best roller composition (and nothing less will answer) is something else again.

America has the best printing because of this know-how in roller making; and a very important part of the set-up is the roller-making equipment used by our leading roller makers, which is also made in this country.

You may get stereotype supplies from the various American newspaper and stereotype supply firms.

SIZEABLE SPECIALIZED JOB

We need your help on a problem with which you or some one in your organization is probably familiar. We are trying to find a source of supply for a printing job as follows: 1. Two or three colors; 2. Repeat design, to be adjusted to size of cylinder; 3. Size, 2 inches by 100 feet; 4. Stock such as used in Sunday supplements or better; 5. Put up in rolls, the cores for which may be wood or fiber, having inside diameter of one-half inch; 6. Quantity, 240,000 rolls per month. Have tried two of the greatest printing firms and they say this is too specialized a job for them. Main difficulty, we understand, is the slitting and rewinding. Any information you can give regarding firms equipped to handle this work will be appreciated.

We are sending you the names of makers of equipment designed for jobs like this, who from the many users of their machines can send you a list of those nearest to you.

PLANOGRAPHY

I am interested in getting information on how Planographing is done and the equipment needed for the process. Please let me know if you have a book containing such information.

Planography at first was the term applied to offset printing done from plates obtained via transfer or contact printed negatives; it has come to include not only this class of offset but also photolithography as produced with the best cameras and on modern presses. Books on planography that are now available can be secured through the Book Department of THE INLAND PRINTER.

NUMBERING MACHINE CLEANER

Can you tell us where we could secure information on a trade-named solution for cleaning and oiling numbering machines in one operation? We do not know the name of the manufacturer.

We are supplying the maker's name of this solution of a type common to a number of industries, and also name of numbering machine maker who can supply similar solution of his own make.

SYNTHETIC ROLLERS

Is it practical to use synthetic rollers on platen presses? We found them satisfactory on our cylinder presses but when this made us optimistic and we tried them on our platen presses the results were terrible. Not even an envelope corner could be inked up. We abandoned the idea, but recently a roller salesman asserted that he could now give us synthetics for cylinder presses so resilient that we can run them over numbering machines and he also said that some of his customers are now using synthetic rollers on platen presses.

It is a fact that more resilient synthetic rollers are now available. If you tried the synthetics out on very worn platen presses, the unsatisfactory results may have partly been due to wear which made satisfactory rolling difficult. New roller sockets and springs may be needed and something to compensate for or sidestep the effect of wear in tracks and trucks. If the

latter repair is needed, steel roller bearers in the chase will afford temporary relief. The test for properly set rollers on a platen press is, after inking up, to place the form in the press and operate it briefly at speed and then stop the press just after the rollers have cleared the form on the ascent. All the outlines of the form will be easily seen in the film of ink on the rollers if they are properly set in relation to the height of the form. If the rollers are riding too high an underlay is needed; if too low, use larger trucks.

GLUING ON COVERS

We have a job coming up which will require the gluing on of 20,000 covers and we will need bookbinder's brush, glue pot, glue, and so on. As this is an unusual job for us we would like to know if there are any economical devices for doing this work.

The suppliers of pots and brushes will be pleased to advise you on labor- and time-saving devices.



"In the Days That Wuz"—The Arkansas Traveler
Cartoon by John T. Nolf, Printer-Artist

What is a "reserve" and why is it so important to profitable investment? Read all about it in . . . **PLAY IT SAFE WITH AMPLE RESERVES** *By A.C. Kiechlin*

● **RESERVES** are foreign to the minds of too many printers, yet reserves are an important factor in business control. Handled improperly, they build up invisible losses that suddenly come to life and land a haymaker on the printer's bankroll. In our field studies, we find that fewer than 30 per cent of the printers record reserves on their books and many shoot wide of their mark in calculating the yearly credits to their reserve accounts.

At this crucial time, with the war over and reconversion to peacetime economy under way, the problem of reserves takes on added importance. All printers who have never bothered about reserves before or who have handled them in a half-hearted way should adopt a more businesslike policy toward them for this year and thereafter.

What is a reserve and why is it so important to profitable management? A reserve is a part of profits set aside yearly to offset depreciation or other business losses that cannot be recorded in any other way; if not recorded, they inflate profits and net worth. Many printers go blithely along assuming that they are in clover on profits when they have been operating under invisible losses for years. This is particularly apropos at this time when costs have been increasing steadily since prewar times, and when modernization and expansion will mean additional expense. From now on, losses through the improper handling of reserves will be higher than in the prewar days. This holds true whether the printer replaces existing equipment with new or operates with the equipment used before or during the war.

There are only three possible approaches to this subject: (1) The status or condition of your reserves as at the end of 1945, the closing year of our wartime economy. (2) The adjustments required to line up your reserve accounts with actual conditions as at the end of 1945. (3) The setting up of adequate reserves for the postwar period.

To determine the status or condition of your reserves, go over your books now, list the unrecovered cost

of each depreciable asset, business building, fixtures, furniture, office appliances, trucks, machinery and non-mechanical equipment. This unrecovered cost is the difference between the original cost and the written-down value. Next, appraise the asset. If you can't make a fair appraisal yourself, consult the manufacturer of the equipment or a disinterested expert on such mat-

**Are you one of the
70% of all printers
who do not record
their reserves ?**

ters. It is unlikely that an appraisal will show greater than book value but, if so, it is wiser not to appreciate the book figures. This may be necessary, however, in order to get an increased deduction for depreciation on the income tax return. Consult an accountant if this condition confronts you. In most cases the book figures will have to be reduced, which means charging net worth with the reduction.

Reserves Set Up Inaccurately

Why such deductions? Because reserves are too often set up hit-or-miss; they too seldom are based on the dependable experience figures, consequently the depreciation charge-offs are too low. This eventually means a lump write-down of the assets and a loss of such deductions on the income tax return. The Government does not permit a taxpayer to recover in later years for prior failure to take any depreciation allowances or for taking allowances inadequate under the known facts of prior years. So, in most cases, where you find that the book figures set aside as reserves are inadequate to cover actual depreciation as shown by a war's end appraisal, you are just out of luck and the write-off is a charge to surplus or net worth.

As a rule, the appraisal will indicate that the asset is worth only salvage value even though it may be in good mechanical operation. With more modern units coming to market in the postwar period, its trade-in allowance or second-hand value will be nominal. If you demonstrate that normally equipment would have been profitable to hold, that because the war brought new units into the field which are less expensive to operate and speedier, utilizing methods revolutionary in operation, and thus more efficient, thereby compelling the premature scrapping of existing equipment, you may be entitled to some tax deduction for forced obsolescence. This allowance differs from normal obsolescence, which is usually included with the depreciation rate.

A forced obsolescence is brought into being in times of great upheaval, such as now, by new inventions, economic changes, shifting of business centers, changes in the industrial arts, prohibitory laws, *et cetera*. This war has brought many distortions to our economy, and the forced obsolescence took a heavy toll in and out of war plants beginning V-J Day.

An appraisal of your depreciable assets versus reserves will help you decide whether you have been a victim of forced obsolescence. If you have been, consider the possibility of getting a deduction for this loss on your tax return. Whether you can or cannot, however, write down the assets affected to actual value so that you enter the postwar period without an inflated net worth. If you can get a tax allowance for forced obsolescence, the saving will add to the nest-egg you have set aside, or should have set aside, for postwar purchases of equipment.

Where printers have opened postwar reserves for expansion, modernization, or promotion, they may leave these recordings "as is" until the amounts set aside are used and then all the necessary adjustments may be made on the books. Postwar reserves are not deductible on the tax return but there is nothing to prevent you from recording them to keep your own figures straight.

The printer is interested in two types of reserves, for depreciation and to cover liability, the former resulting from charge-offs for wear, tear, and obsolescence; the latter to cover an existing liability, the amount at the time not known. Loss on bad debts, loss through a damage suit pending, loss on inventory, are examples of liability reserves, but they will not loom as formidable for the printer as reserves for depreciation.

On all new equipment purchased in the postwar period, the printer should start with the right foot forward and charge off adequately, so that at write-down the scrap value will approximate book value. This is not as difficult as it seems if the printer goes over his experience figures to determine the profitable life-span of new equipment purchased. If he has no experience figures, is buying the equipment for the first time, the manufacturers will help him fix the rate or he should get experience figures from printers using such equipment.

Do not confuse the reserves with funds. This is erroneous. There is a big difference. A reserve account never represents cash. And a fund account always represents cash or equally liquid assets. The reserves are always credit balances on the books; fund accounts are debit balances. Reserves for depreciation, bad debts, and other contingencies are merely bookkeeping entries designed to reflect certain conditions on the financial statement, hence substantial reserves should never lull a printer into a sense of false security.

The purpose of recording reserves is to give the printer a proper perspective as to his profits, assets, liabilities, and net worth, and to minimize "water" on his financial statement. The fact that reserves are not represented by cash does not make them less valuable for the printer's guidance. Cash is only one essential to operation and even big business concerns can show cash for but as little as 20 per cent of their net worth.

Reserves are the cushion against invisible losses that run high with the years unless allowed for when setting selling prices. Printers have lost heavily through lower profits and high taxes because of inadequate charge-offs in prewar years, sometimes because they recorded no reserves at all. In the postwar period, printers should give more consideration to business reserves because they are an important factor in profitable operation.

HANDBOOK LIFTS EMPLOYEE MORALE

● EVERY NEW EMPLOYEE of the W. F. Hall Printing Company, the large publication and catalog printer in Chicago, gets a clear picture of his duties and privileges with the company as soon as he starts on the job, through issuance to him of a 44-page handbook entitled, *You, Your Job, and Your Company*.

The purpose of the booklet is expressed succinctly by Alfred B. Geiger, president of the company, in an introductory greeting to the new employee in which he says that the information presented in the booklet "is for your assistance, that you may know what to expect of us, and that you may know what is expected of you."

Written in a friendly manner, the booklet endeavors to make the employee feel at the outset that he is a welcome and valuable member of the organization. The first paragraph sets the tone when it says "we know you're anxious to feel at home here, so we have made it the purpose of this booklet to assist you in becoming better acquainted with your company and to tell you how you can get the most out of your job. When you have read it through you will be familiar with some of the more important features of our activities and our way of doing things. The privileges, special advantages, policies, and various regulations described here have been established for our mutual benefit." This emphasis on mutuality of interest between management and the employee is continued throughout, so that the book avoids the stigma of paternalism so often associated with employee welfare programs.

The first section of the booklet starts off with a brief history of the company, then outlines the company's policies on employee relations, covering such topics as hours of work, working conditions, method of pay, importance of regularity on the job, and lists a minimum number of rules and regulations for the employee's guidance, leaving conduct for the most part to the employee's "own good judgment."

The second part describes various advantages and benefits provided for the employee's welfare, such as the personnel department where the employee can bring problems connected with his work, as well as his personal problems outside work. It states the company's "promotion from within" policy, describes the vacation plan, and lists such facilities as a cafeteria, plant hospital, and phone booths in the locker rooms.

Group insurance and other security measures sponsored by the company are fully explained, as are the mutual bene-

fit association and credit union operated by the employees. Salary deductions for social security and income taxes are explained, giving a better understanding of these deductions.

The use of such a handbook is an indispensable tool of better industrial relations in a large organization like Hall, where personal contact between management and its thousands of employees is necessarily infrequent. To compensate for this remote personal relationship, the company projects its "personality" through the printed word.

Smaller printing organizations may think such a formal presentation of their company policy is unnecessary, that such matters are easily handled on a person-to-person basis. To a degree they are right, and certainly no such detailed "treatise" as the Hall handbook is required in a small plant with a handful of employees where the "boss" knows everybody by name and sees them every day.

But some statement of the company's policy on employee relations would be helpful even in a small plant. It may be only a 4-page pamphlet instead of a 44-page booklet, but it would accomplish several desired results. First, if properly handled, it would orient the employee in his new surroundings, as the psychologists would put it.

Second, later misunderstandings and disputes will be avoided if the employee is informed from the start, in printed form to which he can refer when necessary, just what his duties and privileges are. He would not have to wonder, for instance, if he is allowed to use the office phone for personal calls—the company statement would tell him immediately if the privilege is extended to him. Little details like this are usually omitted in the original interview because the employer didn't think to bring them up. That leads to later unpleasantness when an employee is reprimanded after he has committed an offense, perhaps unwittingly, perhaps because he had not been informed as to the company's policy.

In the third place, a printed expression of company policy will do something for the employer. In attempting to put it down in writing, he may learn to his surprise that he has only a hazy idea of what his employee policy is, if he has one at all. The very act of writing it down will lead him to formulate for the first time a definite, well-rounded policy which will serve as a permanent guide for his own actions and decisions as well as for those of his employees.

Chinese Banknotes

• In Los Angeles, California, banknotes at the rate of a million per week are rolling off the presses of the Jeffries Banknote Company. This firm is filling a contract for an undisclosed number of millions of the 20-yuan notes which are to be used in Chungking, China.





NEWS AND VIEWS

Our camera takes us roaming across the country, joining in several craftsmen's sessions, also welcoming some returning heroes and extending our felicitations to another publication, then crossing over to Italy to pay tribute to a printer

1. George E. Loder (center), president Lithographers National Association, congratulates Peter C. Goldsmith (left) and Howard McGrath, of Advertiser's Digest

2. International Association of Printing House Craftsmen officers inspect trophies for best club bulletins. Left to right: John L. Reay, H. G. Bradley, Lee Augustine (donor), O. G. Fricke, and E. T. Samuels

3. Directors Graphic Arts Industry, of Minneapolis. Standing: B. A. Tell, L. C. Nelson, G. M. Robertson. Seated: H. W. Dettlef, L. G. Palmgren, S. D. Knudson

4. Craig R. Spicher (center), speaker at Topeka Club of Printing House Craftsmen, with President Don D. Hall, right, and life member Bob Maxwell, left

5. Herbert W. Blomquist, now with E. P. Lawson Company, New York, was chief of machinery section, printing and publishing division, of War Production Board

6. Edward P. Dahlinger, the assistant New York manager American Type Founders, recently exalted to 33d Degree Mason

7. Charles H. Stout rejoins Matrix Contrast Corporation, New York. Entered Navy service in April, 1942, appointed Lieutenant Commander in March, 1944

8. Lt. James P. Wilt, now with Chicago office of Brown-Bridge Mills, flew first load of paratroopers dropped behind the German lines

9. A. C. Lanchantin, appointed head of Industrial Relations Department, Lithographers National Association

10. Alex Alberg, Kansas City Club of Printing House Craftsmen, and Earl Faris, Topeka club, study new booklet issued by Topeka Chamber of Commerce

11. Ulisse Nante, proprietor of Tipografia Nante, Imperia, Oneglia, Italy

Don't Refuse Jobs in Spanish; They're Easier Than They Seem

By P. R. Russell

● THE COMMITTEE for Economic Development has predicted that the products of printing and publishing plants and allied industries may reach three and one-third billions of dollars in the first full year of peace. Public Printer Giegengack told the Printing Industry of America at its Pittsburgh convention: "The general outlook for postwar printing volume is good. There is an unprecedented demand for consumer goods of all kinds, and this indicates that great quantities of printing will be necessary." In the same optimistic vein, Sears, Roebuck & Company has released its biggest spring and summer catalog in twenty-five years, one of 1,380 pages, 432 more than last year.

Consensus of predictions seems to be that all general commercial printing may turn out an increase for 1946 of 35 per cent over 1939 and that lithographing may increase as much as 77 per cent over 1939.

However, you can put this across the face of any optimistic prediction about postwar printing increases: With the individual commercial printer it will still be a matter of his accepting all the particular opportunities for increases that may come his way. One such opportunity already present to printers, especially of the western and midwestern sections of the United States, is sales aids to Latin trade.

To prosper, America must have foreign trade. Our major opportunity lies to the south, down South American way. Even the far inland cities with access to the sea are going after South America's business. Trade associations and individual manufacturers and distributors in coastal and inland cities are organizing to develop trade relations in this direction.

Printing, and a lot of it, is demanded by this increasing volume of foreign trade, but nearly all commercial printers who might profit by this demand shy away from it because it involves a foreign language—Spanish. They take one look at the copy and say emphatically it is not for them.

To one who has undertaken any number of these jobs in Spanish it is difficult to see why so many printers are afraid of it. The plant

in which the writer is employed does a considerable volume of printing in Spanish and has completely dispelled the mental hazard that the printing industry has mistakenly placed about it.

A glance at a page of Spanish copy does reveal a good many accented letters and the rule of inverting the question mark and the exclamation mark at the beginning of the sentence does give the mass of type a complicated appearance, but Spanish composition does not come as hard as it may seem. We do all our Spanish text composition on the Monotype, but slug composition of the language is just as practical.

Actually the number of accented letters in Spanish are limited—the accented letters are used in many words but the variety of such accents is very limited. It is simply a matter of equipping your Monotype or slug-casting machines with the mats for the accented letters. You will need only one face of type, modern or old style, with italic and bold, in point sizes of 6, 8, and 10, each with the mats for accented letters. In the case of Monotype, both the question and exclamation marks are set regular fashion and then inverted by the hand compositor as he corrects the matter. Mats of the inverted characters can be ordered for your slug-casting machines.

For the larger display type, the usual practice is to devise an accent by one of two methods. Where an electrotype foundry is available a drop of hot metal can be deposited on the shoulder of the letter and then tooled into the shape of the accent. This is not as difficult to do as it may sound to one who has not seen it done. Another method is to take an exclamation mark or a letter "i" of a smaller size of the same type and fit it horizontally above the letter to be accented. In fact, leaving the accents off display types is usually permitted. The users of Spanish appear to understand the shortcomings of our printing facilities. Anyway, very few accents are required in any type other than that of the text matter.

Another "bugbear" raised about any Spanish composition concerns

an operator assigned to set it. The truth is that any capable machine operator, Monotype or slug-casting machine, can set the Spanish. With experience his typographical errors will decrease to about the same level as for English. The speed will necessarily be slower, but this too will improve with some experience. Actually many operators like to do Spanish composition. It affords a change of pace from English.

There are some difficulties encountered in proofreading Spanish. Many English proofreaders can do a passable job of putting the proof alongside copy and correcting by comparison. This will do for letterheads and business forms not involving a great deal of text matter. Nearly every printing center has a college or high school teacher who is sufficiently versed in Spanish to proofread for you. That is the procedure used by our plant. The teacher can catch errors that our proofreader misses because of his inability to translate and he gets the incorrect syllable breaks made by the printer. You will be expected to pay a teacher about \$1.00 per hour for his work.

The customer or editor, in case of a publication, will have the final opportunity to catch errors. Even more than with English, be careful to put as much responsibility as you possibly can on the customer for proofreading.

How about the composing room makeup, the hand work on Spanish? Printers in our plant consider Spanish as easy to correct and make up as any other Monotype matter. Some of our modern compositors have not been brought up properly and find difficulty in handling set type—they prefer only slugs. This is purely an inside problem that can be worked out with little difficulty.

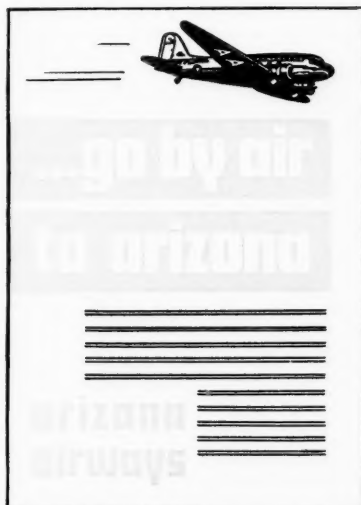
When the Spanish job leaves the composing room, so far as the press work and binding is concerned it is not different from a job done in English. The expense from there on out should be no more.

Spanish composition and makeup is going to cost you considerably more (from two to two-and-one-half times as much) than the English, but you will find the customer fully expecting that additional cost. He has as healthy a regard for the intricacies of a foreign language as you have and expects to pay for it.

Your share of that predicted 35 per cent increase may have to come from this printing for the South American trade, so prepare yourself for it and forget the usually exaggerated handicaps.

That Second Color Works Wonders

but use it wisely!



Poor use of the second color. The tone value of yellow is too near that of the white paper. Type matter, even in reverse, is ineffective



Most halftones are unintelligible in a color such as yellow. Halftones can be printed in color, however, as will be shown in a later article

NUMBER 1 of a series of illustrated articles on the use of a second color in printed pieces. Yellow has been selected as the second color for this article, and the specimens show how it should and should not be used.

● Yellow is a popular hue for the second color, and it justly deserves its popularity. Yellow is warm, alive. It can be used as a purely decorative element, or to achieve realistic effects.

But yellow is a tricky color . . . it can "make" a printed piece . . . or "break" it if you don't watch out. Being relatively weak in tone value, used alone against a background of white paper its effectiveness is lost . . . its use wasted.

Yellow needs the "help" of a color with a strong tone value, as the illustrations here graphically demonstrate. Type in yellow, no matter how bold, and even in reverse, is almost illegible. But when properly combined with a color such as black, readability is increased to 100 per cent.

Yellow is usually unsuited to halftone printing. The breaking up of solid tones into halftone dots lessens even further the contrast between the yellow impression and the white paper on which it is printed.

Perhaps the most important thing to remember when using yellow as the second color is this: Yellow needs the help of a stronger color.

by Glenn J. Church



The second color heightens the effectiveness of the typographical display. Yellow is particularly suited to lettering against a dark background



Yellow, when used as a background for a black halftone instead of for the halftone itself, adds warmth and life to the illustration



Display type in yellow across a gray background is but little more legible than when it is printed on white. A contrasting tone value is needed to give definition to the letters. See the example at the right on this page



With the dark area of the black halftone serving as a background, the type in yellow is now easily read. The use of a lively color such as yellow here also adds a needed spot of color to the otherwise gray page

Woodis—Scientific Printing Educator

An Appreciation by HAROLD E. KING

● Back in the early '90s Winifred Arthur Woodis, born in Brookfield, Massachusetts, hiked to the larger town of Spencer and applied for a job at the Heferman Press. They must have thought the kid had possibilities for he landed the job as "devil" and went through the typical phases of "learnin" the trade.

Four years later we find him at the Blanchard Press in Worcester, one of the outstanding New England plants. Here his knowledge and skill broadened, and it was here he began to enter the typographic contests conducted by THE INLAND PRINTER. His artistry and love of the trade soon began to assert itself by winning in these contests. His thirst for experience and knowledge led him to New Hampshire and Boston after four years in Worcester.

Realizing what a skilled compositor and layout man he was, Blanchard's brought him back as composing room foreman, a position he held four years.

The desire in all true craftsmen's hearts for a shop of his own led him next into business for himself as the Woodis Press. His slogan in those days was "Typographic Artist—Simplicity in Design." Later he consolidated his plant with that of the Terrill Press.



Winifred Arthur Woodis

He next was associated with Henry Lewis Johnson in the typographic department of Huebner, Bleistein Press at Buffalo, New York, pioneers in color offset.

The thought of giving to youth all the benefits of his knowledge caused him to become instructor of printing in the Baron de Hirsch Trade School, of New York, where he taught three years.

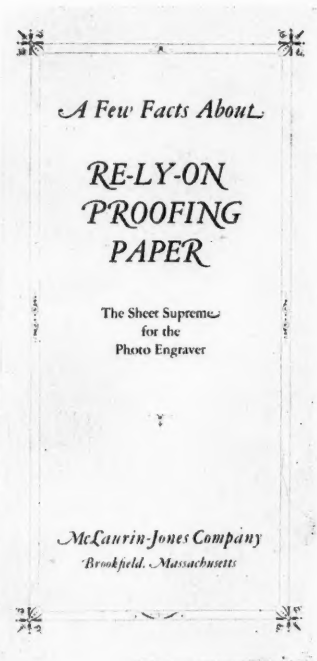
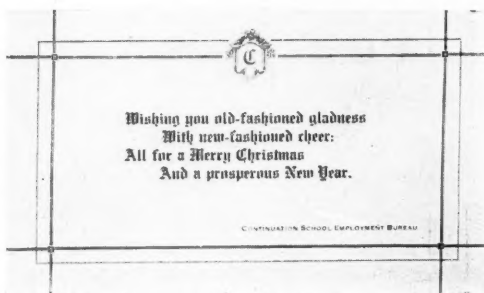
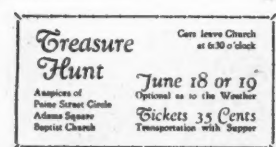
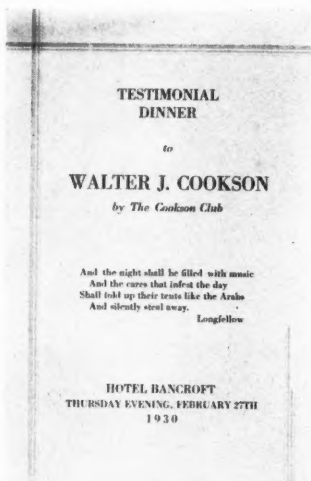
Worcester remained home to Woodis and he returned to enter the employ of the W. B. Crombie Company.

He stayed for two years until the opportunity he had looked for presented itself, that of teaching in vocational schools of Worcester. Here he has developed, over a period of twenty-five years, a scientific curriculum in the instruction of the fundamentals of printing which has been praised and copied elsewhere.

Woodis was essentially a Caslon man and a stickler for simplicity. As a typographer he won eighteen places in contests in this country and one in Milan, Italy. He generally placed from first to third.

Many New England youths and men owe much of their skill, love of the trade, and ideals for finer printing to his inspiring influence and to their contacts with Winifred Arthur Woodis.

Examples of work done by Woodis in the 'twenties demonstrating his distinguished simplicity



★
This section is devoted to short and timely items concerning men and events associated with printing. Copy must reach the editor by the twentieth of month preceding date of issue

THE MONTH'S NEWS

LITHOGRAPHERS' CONVENTION

Three days—May 14, 15, and 16—will be devoted to the consideration of current problems of the industry by the members and guests of the Lithographers National Association at the 1946 convention to be held in Atlantic City, New Jersey. The fourth day—May 17—will be devoted to a golf tournament. Members of the association have been requested to make reservations direct with the Marlborough-Blenheim Hotel.

N.E.A. PLANS CONVENTION

Plans have been made by the National Editorial Association with headquarters in Chicago, to hold its sixty-first annual meeting and first postwar convention in Estes Park, Colorado, June 13 to 16. A special train will be made up at Chicago to leave on the afternoon of June 12, for the convenience of those from the East, South, and middlewestern states.

Among questions to be considered at the convention are the proposed revisions in postal rates which are expected to include schedules increasing second-class and third-class rates. Other matters pertaining to the legislative program of Congress, and regulation of other official agencies of the Government affecting the operation of weekly newspapers, will be presented to the convention.

EXPANDS OPERATIONS

Bodine Printing Company, Michigan City, Indiana, has purchased the commercial printing business of the Dispatch Publishing Company with all its equipment, and is planning to erect an addition to its plant which will give it a total of 10,000 square feet of space. The expansion program of the company will give it a complete letterpress and lithographic plant.

CUNEO BUYS PAPER MILL

John F. Cuneo, president of the Cuneo Press, Chicago, and Hemphill, Noyes and Company, investment bankers, New York City, have purchased the Combined Locks Paper Company, of Combined Locks, Wisconsin, and will utilize the products of the mills for publications printed in the plants of the Cuneo organization. Raymond P. Fischer, one of Mr. Cuneo's attorneys and an officer of numerous other of Mr. Cuneo's corporations, has been named president of the Combined Locks Paper Company.

The paper mills are equipped with five Fourdriniers and have production capacity of 140 tons of light-weight catalog and super-calendered book papers a day. It is said to be one of two paper manufacturers in this country equipped to make the thin groundwood papers used in the large mail-order

catalogs and the telephone directories, some of which are printed in Cuneo plants.

FRANCE DECORATES R. K. SMITH

The French Government's "Croix de Guerre with Silver Star" has just been awarded Major Ruthven K. Smith, who before the war managed the Graphic Arts Association of Washington, D. C.

Major Smith, who also is the former secretary of the Milwaukee Graphic Arts Association, won the honor for services rendered in the capture of the Isle of Elba, an invasion in which he led the American combat team. He took



MAJOR RUTHVEN K. SMITH

charge of the island for the Allied Military Government until it was restored to Italy. A veteran of naval aviation of the first world war, Major Smith wears five battle stars.

Since his release from the service last month he has been working on several books about printing, one to be a text on learning estimating, to add to other graphic arts books he has written.

JOINS AHREND AGENCY

Captain Leonard Rich has become an account executive of D. H. Ahrend Company, New York City direct advertising agency. He was formerly with the Information and Education Division of the War Department and served as an editor of *Army Talk*, a weekly orientation bulletin. On the staff of the Army Orientation Program, he helped in promotion of the War Department program in the field command.

CRAFTSMEN TO MEET AT MONTREAL

Plans for the twenty-seventh annual convention of the International Association of Printing House Craftsmen to be in Montreal, Canada, September 8 to 11, were formulated at a meeting of the board of governors held in Chicago, February 9 and 10. The educational program will be arranged by J. Homer Winkler, Columbus, Ohio, chairman of the educational commission, and the Montreal arrangements will be made by a committee under the joint chairmanship of Lorene Cummins and Neil Powder.

International President H. Guy Bradley and associates on the board decided that the association should employ a full-time secretary to manage the details of the organization, and a resolution to that effect will be presented to the convention.

RECEIVES HONOR CERTIFICATE

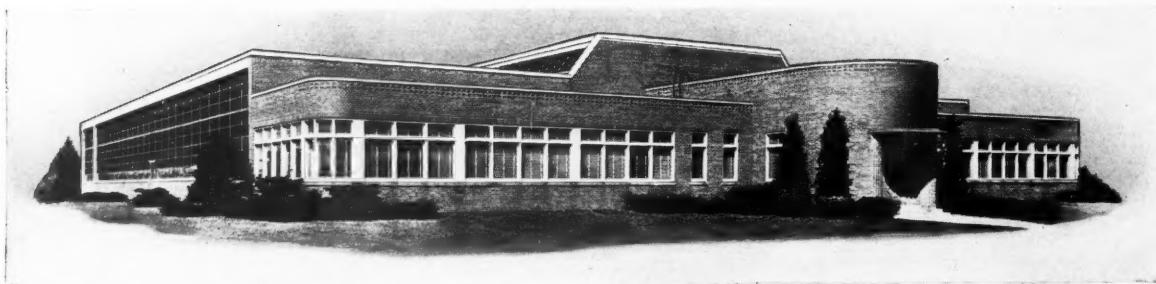
Because Lanston Monotype Company, Philadelphia, had been manufacturing its product under the same brand name for more than fifty years, it was the recipient of a certificate of public service from the Brand Names Research Foundation at a dinner in New York City on February 5. About one hundred other manufacturers of "brand name" products were similarly honored at the same time.

Tolbert Lanston named his invention "Monotype" when he filed an application for a patent to cover his typesetting machine in 1885. The patent was granted in 1887, and the name has been used constantly since that time as a brand name and trademark.

KIMBERLY-CLARK SUBSIDIARY

Another development in the series of postwar improvements of the Kimberly-Clark Corporation, Neenah, Wisconsin, is the founding of a townsite and the erection of a new pulpwood papermill in a timber area in the Province of Ontario, along the Trans-Canada Highway at a junction point of the Canadian National Railways, 150 miles northeast of Port Arthur and 250 miles northwest of Sault Ste. Marie. Winter headquarters for the construction crews have been established at Schreiber, Ontario, and it is expected that all building operations will have been completed by the end of 1947, so that the production of pulp will begin in 1948.

The management of Kimberly-Clark Corporation selected the area because of the suitability of the timber for pulp required in its expanded program for making book papers. Cola G. Parker, president of the corporation, said that under modern forestry practice and sustained yield operation, the area will assure a continued supply of pulpwood for the proposed mill.



New plant of E. F. Schmidt Company, Milwaukee, as it will appear after remodeling buildings formerly occupied by the Borg-Warner supercharger plant

SCHMIDT COMPANY EXPANDS

Expansion plans of the E. F. Schmidt Company, printer and lithographer of Milwaukee, include remodeling a one-story, air-conditioned building which was formerly the Borg-Warner supercharger plant. The Schmidt concern purchased the seven acres of buildings and grounds to provide adequate quarters for the firm's expanded volume and to house new equipment which has been ordered.

OPEN SAN FRANCISCO OFFICE

The Champion Paper and Fibre Company has announced the opening of a new district sales office in San Francisco, with Clarke Marion, a vice-president of the company and former manager of the Champion mill at Hamilton, Ohio, in charge as district manager. For nearly five years Mr. Marion was in charge of the office of the company at Washington, D. C., established to co-operate with the War Production Board and other agencies of the Government. During that period he also served on several wartime committees.

Herbert W. Suter, vice-president and general sales manager of the company, announced that the opening of the new district office would provide direct service to the distributors of Champion's products along the Pacific Coast.

OPEN \$100,000 LABORATORY

Don Graves has been placed in charge of a new \$100,000 testing laboratory of the Federated Metals Division of the American Smelting and Refining Company, at Whiting, Indiana, so Max Robbins, the general manager, has announced. The laboratory, designed to solve problems related to customers' uses of type metals and other products of the company, is equipped with testing apparatus required in metallurgical research.

L.T.F. EXCEEDS DUES GOAL

The goal of the Lithographic Technical Foundation, New York City and Chicago, for annual dues of \$65,000 for 1945, has been exceeded, according to a report by W. E. Griswold, executive director. He reported that the goal for 1946 has been set by the board of directors at \$100,000.

"Our goal of \$1,000,000 for endowment was not quite realized," said Mr. Griswold. "However, over \$70,000 came in as gifts for special purposes, three of them being the establishment of New York City headquarters, moving our research laboratory from Cincinnati to Chicago, and equipping the Gleason House in Chicago."

He reported that three lithographers underwrote a fund of \$30,000 for production of educational courses used in

various schools, and one lithographer contributed funds to defray expenses for all texts, manuals, and research bulletins which were published by the Foundation in 1945.

AUER BECOMES HOE PRESIDENT

Joseph L. Auer, associated with R. Hoe & Company since 1937 as vice-president and general works manager, has been named president of the company and a member of the board of directors. He succeeds Harold G. Cutright who recently resigned from the presidency.

During the war, Mr. Auer was in full charge of the production of war materials in the Hoe factories, and in consequence of the substantial contribution of the company toward the war effort, several commendations were received from the War Department. Mr. Auer received one of the earliest citations received by a civilian from the Ordnance



JOSEPH L. AUER

Department, and was also the recipient of the War Department's Certificate of Appreciation because of his service as vice-chairman of several committees.

Previous to his becoming associated with the Hoe organization, Mr. Auer was superintendent of the Crocker-Wheeler Electric Manufacturing Company, Amper, New Jersey, and had previously been works manager of the I. P. Morris-de La Vergne Machine Company, Philadelphia. He is a member of the American Society of Tool Engineers, and of the American Society of Metals.

PLAN ANOTHER RATIO STUDY

More than 400 printing establishments having a total annual sales volume exceeding \$125,000,000 are expected to participate in furnishing the 1945 data for the use of the ratio study committee of Printing Industry of America, whose detailed report will probably be ready for distribution at the fall convention. Dennis A. Sweeney, Indianapolis, chairman of the committee, has set April 30 as the closing date for printers to have their 1945 data in the hands of the ratio committee.

In the twenty-second annual report of the committee, titled "Ratios for Printing Management," recently issued, composite figures covering 1944 operations of 387 plants doing a total business of \$102,708,000, were shown. The report included fifteen major tabular presentations and numerous smaller breakdowns.

Associated with Mr. Sweeney on the ratio study committee are William C. Bowles, of Nashville; Ernest T. Engle, Cleveland; Richard Chamberlain and Richard Nash, both of Washington, D. C. A staff of six persons was employed in preparation of the report.

SUTER HEADS CLEVELAND OFFICE

The appointment of Herbert W. Suter, Jr., as manager of its Cleveland sales office has been announced by the Champion Paper and Fibre Company replacing C. Frederick Chaplin, who recently resigned to become vice-president and sales manager of Dwight Brothers Paper Company, Chicago. Completing three years of service with the Army Air Forces, Mr. Suter was discharged with the rank of Captain. He was associated with the Standard Paper Company, in Cincinnati, and also with the Champion office in Cleveland, before entering the armed forces.

INCREASE MANUFACTURING SPACE

Finding its present quarters and facilities inadequate to meet the needs of its increasing business, the National Process Company, lithographer of New York City, has been seeking some larger and improved manufacturing space. A site has been selected in Clifton, New Jersey, with a group of buildings having about four acres of floor space, offering an ideal situation for efficient lithographic production, and allowing ample room for further growth. The company will maintain a sales office in New York City, which will be in constant contact with the plant through direct telephone lines and also messenger service, and daily trips will be made for deliveries by the company's own trucks as well as by established trucking services.

Several new multi-color presses which have been on order will be installed in

the Clifton plant as they are delivered. As this new machinery is put into operation, similar units will be moved from New York City. Hence the whole plant will eventually be shifted to Clifton without interruption to the company's service. It is expected that this gradual shifting of the entire plant may require nearly two years.

JOINS PHILADELPHIA STAFF

John Warren Seybold, who during three years of the war served in various capacities with the Regional War Labor Board of Philadelphia, has become associated with the Printing Industries of Philadelphia as the director of the newly organized industrial relations department.

MIDWESTERN MANAGER NAMED

Paterson Parchment Paper Company, with headquarters in Bristol, Pennsylvania, has announced that Joseph X. Gubbins has been promoted to the position of midwestern sales manager with headquarters in Chicago. Announcement was made by E. R. Leonard, who is the vice-president in charge of sales of the company.

PEARL HARBOR PRINTER

Lieutenant Marshall G. Baldwin, USNR, has assumed direction of the Publications and Printing Office for the Fourteenth Naval District, Pearl Harbor. In this capacity he operates a half-million dollar plant equipped with the best for offset and letterpress, in a new building which Lieutenant Baldwin helped design and lay out.

"It is a beautiful picture except for one thing—practically no experienced personnel to run the plant," wrote Lieutenant Baldwin to the Young Printing Executives Club of New York, of which he is a member. "Three months ago I did not consider myself a pressman or a compositor. Now I am not only that but an instructor as well."

Before being assigned to Hawaii, Lieutenant Baldwin was in charge of a Navy duplicating plant in Washington. A graduate of the Printing Department, Carnegie Institute of Technology, he was employed in the printing department of the Colgate-Palmolive-Peet Company, Hoboken, New Jersey, before he entered the Navy.

ADD TO PACIFIC STAFF

Two additions to the staff of the Pacific Coast Agency of the Mergenthaler Linotype Company have just been announced. D. Gerald Cloud, former president and manager of the Pacific Typesetting Company, Seattle, is one, and the other is Captain Frank F. Wiggins, who joined the organization before he became an aviator in the U. S. Army Air Corps. Captain Wiggins is a production engineer who will work out of the San Francisco office.

A. H. MILLER TRANSFERRED

Anthony H. Miller, who has been in the production department of Woods Newspaper Machinery Corporation, of Plainfield, New Jersey, has been transferred to the company's eastern sales engineering staff, with headquarters at the executive offices in New York. Formerly associated with the J. M. Huber Printing Ink Company for a number of years, Mr. Miller joined the forces of the Wood Company in 1943 and handled the expediting of important war work done by the company.

ESTABLISH BRANCH FACTORY

The United States Envelope Company, with headquarters in Springfield, Massachusetts, has purchased a plot of land in Atlanta, Georgia, upon which a modern envelope manufacturing plant will be erected this year. The reason for this new expansion is to give the paper merchants and printers in that area improved service, so E. V. Johnson, the first vice-president and general manager, announced.

HALL MADE WESTERN MANAGER

Gordon C. Hall, for many years executive vice-president of the Associated Printers and Lithographers of St. Louis, and for the past five years an officer in the United States Navy, has been appointed western manager of the Lithographers National Association, to have



GORDON C. HALL

his headquarters in Chicago. Announcement of the appointment was made by W. Floyd Maxwell, executive director of the association, whose headquarters are in New York City. Mr. Hall will supplement the work of the eastern headquarters in all activities pertaining to the association's membership in the Middle West.

During the recent war, Gordon Hall served as a captain in the Navy, and was officer in charge of the plant inventory division of the bureau of supplies and accounts in Washington, D. C. He had also served in the Navy during World War I.

MERGE HOWARD COMPANIES

Howard Paper Mills, Incorporated, is the name of a consolidated corporation consisting of the Aetna Paper Company, Dayton, Ohio, and the Howard Paper Company, Urbana, Ohio. Management of the company and its subsidiaries, the Maxwell Paper Company, of Franklin, Ohio, and the Dayton Envelope Company, Dayton, Ohio, will continue under the leadership of the executives who were very closely associated with the late Colonel H. M. Howard during his operation of the four mills, which employ approximately 1,000 persons.

Harry A. Legge, of Urbana, who succeeded Colonel Howard as the president, continues as head of the consolidated

company. Other officers are: W. B. Zimmerman, Franklin, Ohio, the executive vice-president; Charles F. Goodenough and K. P. Geohegan, both of Dayton, as vice-presidents; Eugene H. Hoffman, Lebanon, Ohio, the treasurer; Joseph A. Cobey, of Dayton, secretary; and K. C. Koehler, of Dayton, controller.

President Legge announced that no changes in personnel or operating policies will be made, and that the nationwide distribution of the products of the companies will be continued through established distributors. Sales offices of the company are maintained in New York City and Chicago.

NEW DWIGHT VICE-PRESIDENT

C. Frederick Chaplin has joined the Dwight Brothers Paper Company, Chicago, as vice-president and sales manager, according to an announcement from John B. Ughetti, president of the company. An expert in design and the use of paper in the packaging field, Mr. Chaplin was formerly manager of the Cleveland sales office of the Champion Paper and Fibre Company. In his new capacity with Dwight Brothers Paper Company his duties will include the promotion of papers especially suitable for packaging purposes, as well as the sales of the many printing and converting grades of papers handled by the company.

PAPER COMPANY EXPANDS

An expansion program which will increase its capacity 60 per cent and add about one hundred additional employees to its payroll has been announced by the Chillicothe Paper Company, Chillicothe, Ohio. The addition of a new and larger paper machine, with auxiliary equipment, and the installation of a new power plant, are included in the expansion program. These plans were approved at a meeting of the board of directors on January 16, and were announced by the company's president, A. P. Story.

The expansion program will be under the general supervision of the vice-president of the company, E. F. Bearce. Plans call for construction to begin about March 1, but as it will take about fifteen months to get delivery on the new paper-making machine, it is expected that the full operation of the expanded facilities will not take place before the spring or summer of 1947.

Chillicothe Paper Company was organized following the first world war. It has shown steady progress in its twenty-six years of operation, and has acquired an enviable reputation for making high grade book and offset papers as well as greeting card papeteries.

PRINTERS ERECT ADDITION

Work has begun on a \$30,000 addition to the plant of the McCormick-Armstrong Company, Wichita, Kansas, which is expected to be ready for occupancy by July 1. The new addition is the first unit of an expansion program planned by the company, a two-story building, 31 by 120 feet, adjoining the present structure. A second larger unit will be erected to the rear of the plant.

New equipment previously ordered includes color lithographic presses, photographic and platemaking materials.

The company has been in business for forty-one years and has developed into one of the largest printing, lithographing, and advertising firms west of the Mississippi.

What's New

IN THE GRAPHIC ARTS?

TWO PRODUCTS—W-R Sprayer-Gun Wax and W-R Process Color Wax—are being announced by the Wax Refining Company, to prevent offsetting, mottling, picking, sticking, and to prevent inks from crystallizing. The sprayer-gun wax is colorless, odorless, and harmless, so the manufacturers state. The process color wax is made to be mixed directly into the ink, therefore does not require sprayer gun equipment, according to the announcement.

AN ATTRACTIVE sample book introduces the new line of Jersey cover, announcement and bristol papers offered by the Riegel Paper Corporation, of New York City. In three finishes, antique, embossed, and plate—the antique in three weights and four sizes, the embossed in one weight and three sizes, the plate in two weights and two sizes—the line includes a wide range of colors.

THE UNITUBE PRESS, just announced by the Goss Printing Press Company, Chicago, is designed so that medium-sized daily newspapers can meet the demand of advertisers who want to use colors in their advertisements. It is a unit type of press of 4-page design.

"Color can be obtained on any or all webs by reversing cylinders or by adding color cylinders at the tops of units, or by a combination of these two methods," so the announcement reads.

Features include the Goss tension plate lockup and the continuous-feed ink system to insure maximum printing quality at any speed. The cutoff is designed with a 21-inch column.

The engineering research on the press was begun prior to the war, and the Goss factory is now in production on the model. The continuous-feed ink system incorporated in the press provides for uniform in-feed of ink which is designed to eliminate color variations in the printed product. This principle which eliminates ductor or ink-feeding rollers will henceforth become standard equipment on all newspaper presses

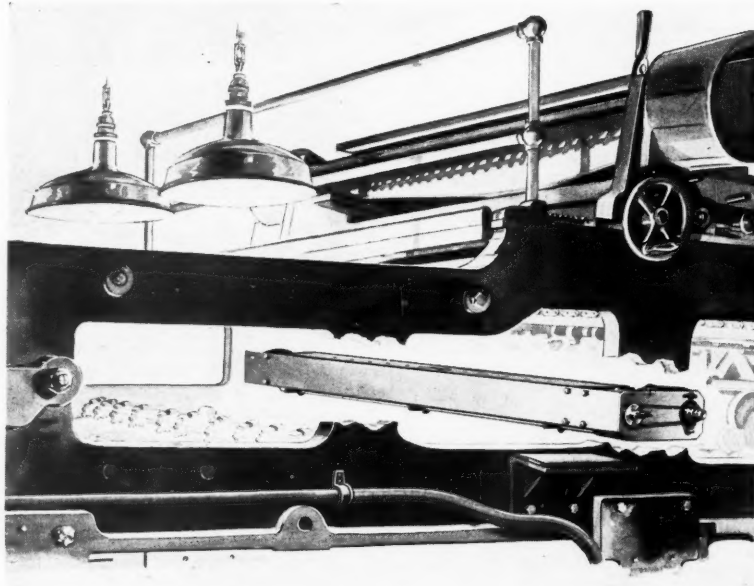
manufactured by Goss. The Unitube Press can be supplied with underneath feed where the paper room is at a lower level than the pressroom floor.

EVERY TYPE OF PRESS can be equipped with an Oxy-Dry Sprayer which uses an edible powder, electrically deposited

oxidizing effect upon the wet ink. The sprayer has a fountain-like or V-shaped container extending across the entire press width. A revolving metal cylinder protruding below the trough interior is filled with the anti-offset powders, keeping them in a state of agitation for even distribution over the printed sheet.

A NEW COLOR-CONVERTIBLE newspaper press, pre-engineered to provide extra colors where and when they are wanted, has been announced by R. Hoe & Company. The press incorporates important fundamental advancements in design and also in performance, and has been planned to meet requirements of post-war newspaper printing which, with or without color, will reach new heights of quality and quantity production.

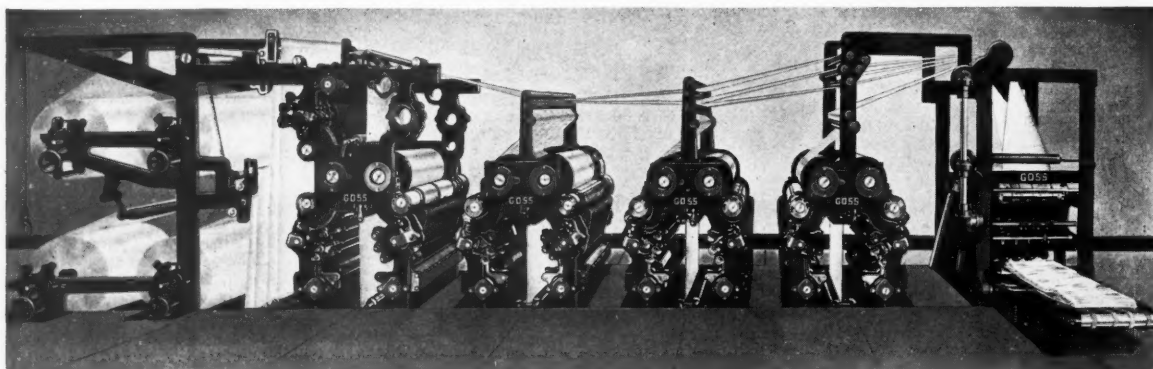
Standard black units are arranged for the addition of color cylinders in a very simple manner, without changing the



The Oxy-Dry sprayer attached to press, with part of press frame broken away to show position

directly upon freshly printed sheets in the press delivery, to prevent offset. The device is offered by Oxy-Dry Sprayer Corporation, of New York City, and is used in connection with an electronic tube which atomizes the powder and forms ozone which in turn exerts an

cylinder caps, guards, or gearing. Entire units or individual printing couples may be made reversible for R.O.P. color in combinations or in an arrangement providing for the placement of extra colors on any page in the product. This is possible, it is said, because all gear and



New Unitube press, designed by Goss Printing Press Company for medium-sized daily newspapers, permits use of additional colors in advertisements

main drive housings are pre-engineered so that the minimum amount of additional parts may be added at any time to any black unit when extra colors are required.

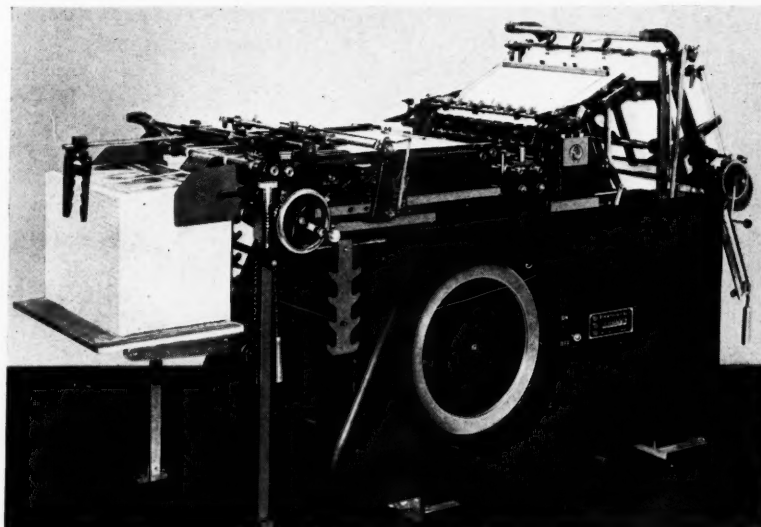
Further color flexibility is inherent by reason of the fact that ink pump boxes may be removed from the rail very quickly to permit substitution of spare boxes reserved for color, or units may at any time be equipped with auxiliary portable pumps or dual ink rails with a pump box at one end for black ink and another at the opposite end available for color. Drive housings at both ends of the press units have facilities built into them initially for accommodating ink pump drives. Also, the drives of all standard ink pump boxes are such that they can be reversed quickly and simply when cylinders are reversed.

Other important features of the new press include the Hoe reel, tension, and full-speed web splicer in which are pro-

ADDING CASTERS to vibrating paper jiggers produced by Syntroon Company, Homer City, Pennsylvania, enables the operator to move the jigger around from one position to another with a minimum of effort and loss of time, so the company has announced. Two models of the jiggers are now available, one with a 14 by 20 inches deck, and the other with a 26½ by 31 inches deck.

THE BANTHIN automatic cylinder press with two rollers and one auxiliary, has been announced by John Webendorfer of the Banthin Engineering Company, Bridgeport, Connecticut.

The press, weighing 2,500 pounds, is 41 inches high to top of cylinder, and will take a sheet as large as 13 by 20 inches, and as small as 3 by 5, the thickness ranging from onionskin to 4-ply cardboard. The top of the feeder is 52 inches from the floor, the sheets being fed down into the press by means



Automatic cylinder press manufactured by Banthin Engineering Company, Bridgeport, Connecticut

vided utmost visibility as well as simplicity, also simple inexpensive splicing materials, electrically-controlled driven belt tension, tension adjustable for fractional width rolls, automatic auxiliary spindle brake tension, push-button control throughout including push-button operated splice, also a one-piece knife which severs the web completely.

Another feature is the Hoe streamlined super-production folder having anti-friction bearings throughout, also selective main folder drive in oil-tight casings with forced-feed lubrication, circularly guided formers and folding blades which are adjustable in unison, fold equalizing adjustment, improved transverse collecting, anti-choke protection, and shear pin protection.

Correct exposure readings for the camera in the darkroom and for balancing light in the studio are possible in a new improved meter announced by General Electric Company, Meter and Instrument Division. Weight of the meter has been reduced by the use of a compact, internal-pivot element, first developed for electric instruments utilized on military aircraft. A redesigned case completely protects against dust and moisture.

of suction, air for which is supplied by a pump operated by an individual motor, so that the feeder can be set independently of the press motor drive. The feeder capacity is 12 inches, and the capacity of the delivery is 27 inches. The drive motor is one-horse power and the blower motor, one-third horse power. The chase may be placed in position either from the side or back.

Floor space required for the press is 38 by 94 inches.

A NEW AND SIMPLE humidifying apparatus which attaches to the radiators of hot-water and sub-atmospheric pressure heating systems has been announced by the Skilbeck Manufacturing Company, Kenosha, Wisconsin. The apparatus diffuses water into the air as it is heated. On hot water systems the humidifier utilizes the water circulating through the radiator. On sub-atmospheric pressure systems the water is carried to the humidifier by a small copper tube connected to the nearest water source. In both types the water trickles onto an absorbent cloth which is wrapped around three heated coils, these coils providing a rapid rate of evaporation. A weighted valve regulates the flow of water as evaporation demands.

CHANGES NAME; PLANS BUILDING

Atlanta Graphic Arts, Incorporated, is the new name of the printers' group which had been operating in that city since 1894 as the Atlanta Master Printers Club. In its reorganized status, the organization will include in its membership not only printers but lithographers, stationers, publishers, engravers, suppliers, and all the others engaged in any branch of the graphic arts.

Plans have been announced by the association to raise funds to pay for a building to house the organization. Alex Dittler, who originated the idea, heads the building committee, and with Co-Chairman Cully A. Cobb, is directing the drive for funds.

Richard N. McArthur, a director of PIA, is president of the association. The other officers are R. E. Damon, Atlanta Lithograph Company, as the vice-president; Harry W. Bulice, of the Ivan Allen-Marshall Company, the treasurer; and Harriett Mae Judd, secretary.

Printing is Atlanta's first industry in value of output and in number of employees, so the association states, a claim based upon statistics gathered by the U.S. Bureau of Census.

EDUCATORS ELECT OFFICERS

Otis H. Chidester, of Tucson Senior High School, Tucson, Arizona, is president of the National Association of Printing Education, as a result of mail ballots cast by members, according to an announcement by Harold G. Crankshaw, retiring president. Other officers elected include Leroy Brewington, Kansas State Teachers College, vice-president; and Herman A. Slater, American Type Founders, Elizabeth, New Jersey, treasurer. Staley Berryman, Evansville, Indiana, is the new executive secretary.

Newly elected members of the board of directors are: Charles S. Newman, Rochester, New York; George R. Deuel, Pittsburgh; Everett V. Harris, Atlanta; Edward V. Kurtz, Detroit; Harold L. Chesterman, St. Charles, Illinois; Aubrey M. White, Fort Worth; Windsor A. Straw, Brookings, South Dakota; and Selmar O. Wake, who is from Santa Barbara, California.

MOVES BACK TO NEW YORK AREA

Three acres of land have been acquired by the Linotype Parts Company at Teaneck, New Jersey, for the construction of a 25,200 square-foot building. The building operations are now in progress.

The new building will cost about \$100,000, will be of fireproof construction, and will be ready for occupancy within two months. It is expected that the new plant will employ 150 persons, one-third being women. Most of the men to be employed will be highly skilled mechanics and tool makers.

The Linotype Parts Company manufactures parts for typesetting machines and also makes electric motors.

DISTRIBUTES TRADE CUSTOMS

Copies of trade customs first adopted by the United Typothetae in 1922, and revised by the convention of the Printing Industry of America, are being distributed to printers and lithographers of the United States, and through them are to be called to the attention of all buyers, so an announcement issued by PIA stated. The complete text of the document was printed in THE INLAND PRINTER following the PIA convention in October, 1945.

**ATF CHIEF
OFFSET PRESSES
GET WORK DONE**



Quick to get started, and easy to handle, with adjustments simple and readily accessible, the ATF Chiefs plow through the day's jobs as they come; color work or simple black-and-white, turning them out profitably and speedily. The great majority of offset jobs come within the size range of the three ATF Chiefs, 14 x 20, 17 x 22, and 22 x 29. Ask your ATF Salesman, or write for commercial samples of actual runs that show what the Chiefs can do for you.

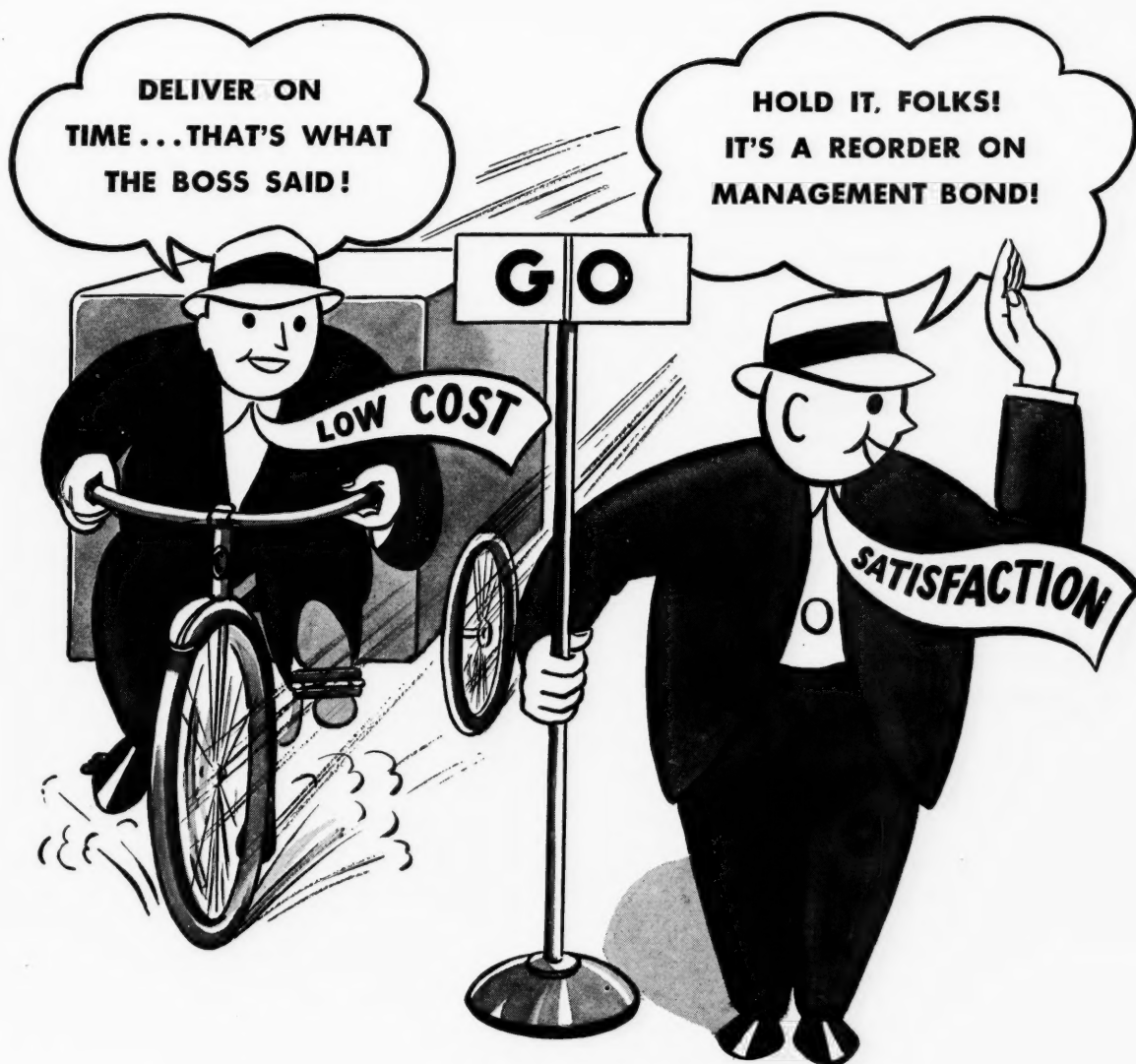


AMERICAN TYPE FOUNDERS

200 ELMORA AVENUE, ELIZABETH B, NEW JERSEY

**OFFSET...complete from
darkroom to pressroom**

ATF Precision Cameras and plate-making equipment are modern, efficient, and inexpensive, too.



You can keep your delivery promises when you use Management Bond, because this watermarked Hammermill product is a *uniform* paper... a fast and dependable worker on your presses. It is made for jobs where good printing at low cost is essential.

Management Bond is an efficient performer in your customer's business, assuring the satisfaction that leads to reorders for you. And remember: *every reorder is an extra profit.*

Management Bond is available in white or colors, in standard weights and sizes through Hammermill Agents all over the country. Hammermill Paper Company, Erie, Pa.



Please Mention THE INLAND PRINTER When Writing to Advertisers



"Not One Sheet Offset in a Press-run!"

If you are one of the fortunate printers who owns Paasche "No-Offset" Equipment, you, of course use the Solution specially developed for it by Paasche.

But with any other spraying equipment, you will also get better results using Paasche "No-Offset" Solution. Because it's instant drying; clean and free-flowing; provides most effective sheet separation; non-settling and non-clogging. Approved by State, Health and Legal Authorities. There's a grade to meet every requirement for preventing ink-offset—under all the various paper, ink and humidity conditions—and for all kinds of printing, including metal foil and cellophane, food wrappers and containers.

Write for the complete price list of solutions, which describes the best grade for each purpose.



"That's what I call clean presswork"

Paasche Airbrush Co.

1905 DIVERSEY PARKWAY • CHICAGO 14, ILLINOIS

PAASCHE AIRBRUSH (CANADA) LTD., 300 MAIN ST., TORONTO 13.. 41 YEARS AIREQUIPMENT PIONEERING

Representatives in All Principal Cities



metal handling costs

By eliminating the old furnace method of melting and pigging type metal the MONOMELT system—

- Reduces costs by moving type directly from kill-out to type casting machine.
- Reduces dross loss 50% to 75%—less frequent toning of metal is necessary.
- Cuts "down" time due to metal troubles—you get more productive hours per machine.
- Because metal is kept in better balance the casting temperature can be reduced 35° to 50° assuring high quality slugs that mean easier proofing, better mats, finer press work.

with the MONOMELT system

HERE IS HOW ONE NEWSPAPER SAVED MONEY AND TIME WITH THE MONOMELT SYSTEM

One newspaper using 17 typecasting machines threw out their obsolete furnace, saved \$1,273.68 per year in metal and handling costs alone with the MONOMELT system. They made a further saving because the efficiency of each typecasting machine was increased 10% to 25%.

Investigate MONOMELT system of type metal handling and see how it will save you money and time while improving your typecasting. Write today for detailed report of savings made with MONOMELT in a typical newspaper plant.

MONOMELT DROSS SIFTER

● Keep your type metal cleaner with the MONOMELT Dross Sifter. Fits tightly in the end of standard dross drum, vanes in top spread dross evenly over screen for rapid, efficient sifting. Cleaner metal reduces machine troubles, improves quality of slugs. Mail your order today. Price \$25.00 f.o.b. Minneapolis.



MONOMELT COMPANY

1611 POLK STREET NORTHEAST
MINNEAPOLIS 13, MINNESOTA

*You are Cordially
Invited*

TO VISIT THIS NEW

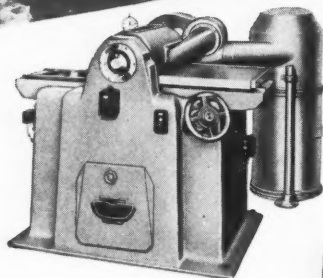
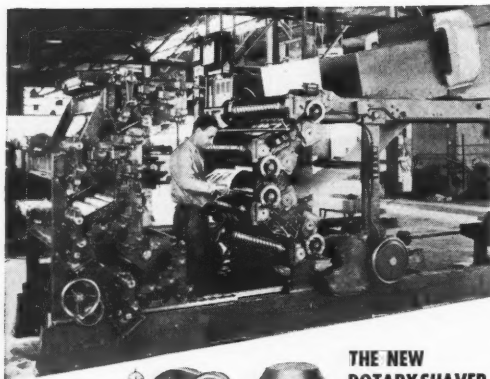
VANDERCOOK DISPLAY ROOM

IN CHICAGO—ON THE GROUND FLOOR OF THE
TRANSPORTATION BLDG., 630 S. DEARBORN ST.

Located in downtown Chicago, these spacious quarters were planned for
your convenience . . . to discuss your proving problems with us as well as
obtain information regarding Vandercook Proof Presses, Block Levellers,
and other Premakeready Equipment.

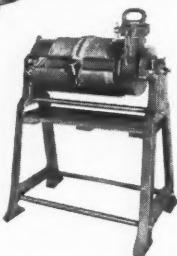
VANDERCOOK & SONS, INC.





THE NEW ROTARY SHAVER

with less moving parts, for simplicity, accuracy, durability and safe operation. Controlled heights guaranteed within .001". For better printing plates, send for free illustrated folder.



THE NEW PLATE REGISTERING MACHINE

that registers plates swiftly, accurately, safely for little money. Send for free illustrated folder.

5 Simple Operations

that conspicuously reduce 4 to 6 color printing costs.

1. To make ready, unlock the ink carriage, turn hand wheel, step in, register plates, adjust ink roller or raise tympan sheet.
2. Lightning speed on all four color printing—625 to more than a thousand feet a minute, guaranteeing 100% hairline register.
3. Press button speed control. Full view ink fountains, with micrometer control, adjusted while the press is in motion.
4. Perfect hydraulic automatic rewind or sheet delivery.
5. Long, steady runs on glassine paper or stock up to 240 pound basis at unbelievably low maintenance costs.

SEND FOR FREE ILLUSTRATED BOOKLET

HESS & BARKER

Printing Press & Equipment Manufacturers

212-22 S. Darien St., Philadelphia 7, Pa.

Telephone: Pennypacker 4070

More Profit Than Ever WHEN YOU REPLACE WORN-OUT MACHINES WITH Roberts Models 27 and 28

Nowhere else will you find all the advantages that ROBERTS builds into numbering machines. Yes—recommend, specify, and buy ROBERTS...



For very low original cost—easy upkeep—extra speed and long life.

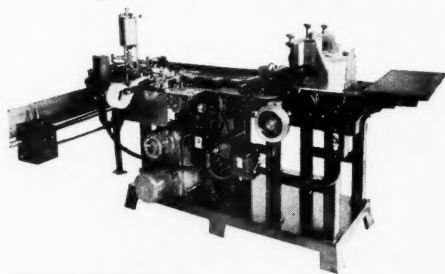
Recondition all machines once a year!

Prices and Literature on Request

EXTRA FEATURES: Roman or Gothic style figures. Forward or backward action. UNCONDITIONAL GUARANTEE.

Roberts Numbering Machine Co.
694-710 Jamaica Ave. Brooklyn, New York

Back Again! In Limited Numbers!



NEW IMPROVED HIGH-SPEED, STRAIGHT-LINE-FEED CHESHIRE MAILING MACHINES

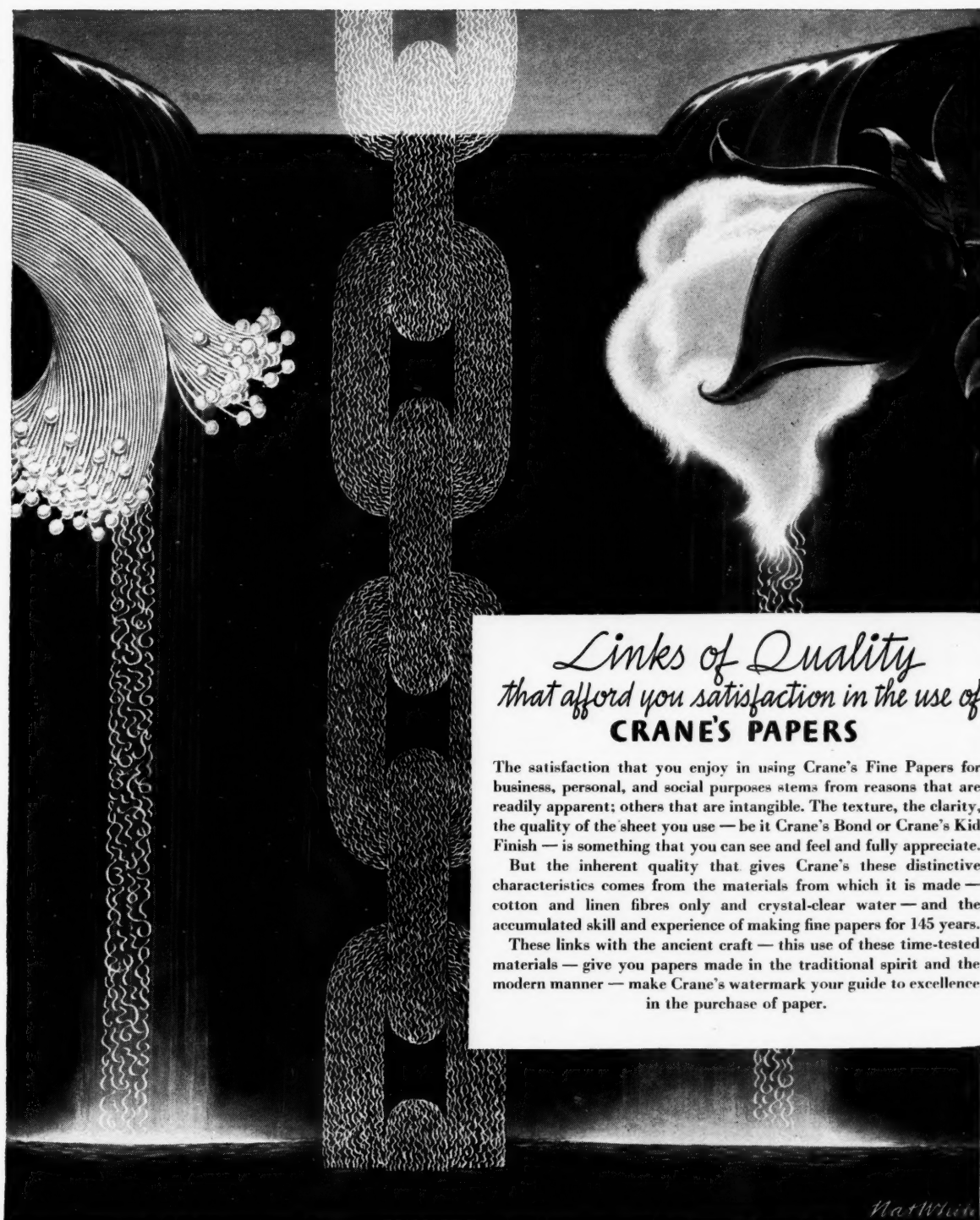
**AUTOMATICALLY CUT AND ATTACH
ADDRESSED LABELS TO ANY PUBLICATION**

- Proved by years of service to largest publication printers.
- Newly improved straight-line feed.
- Late design labeling head increases efficiency.
- Extremely high speed—real labor saver.

Write your requirements to:

CHESHIRE MAILING MACHINES

1415-25 WEST ALTGELD ST., CHICAGO 14, ILL.



Links of Quality
that afford you satisfaction in the use of
CRANE'S PAPERS

The satisfaction that you enjoy in using Crane's Fine Papers for business, personal, and social purposes stems from reasons that are readily apparent; others that are intangible. The texture, the clarity, the quality of the sheet you use — be it Crane's Bond or Crane's Kid Finish — is something that you can see and feel and fully appreciate.

But the inherent quality that gives Crane's these distinctive characteristics comes from the materials from which it is made — cotton and linen fibres only and crystal-clear water — and the accumulated skill and experience of making fine papers for 145 years.

These links with the ancient craft — this use of these time-tested materials — give you papers made in the traditional spirit and the modern manner — make Crane's watermark your guide to excellence in the purchase of paper.

Good typography and the best of presswork fall short of the mark if the paper lacks quality and character. Crane's Papers complete this three-point production of work of excellence. Using Crane's is good business that usually leads to better business . . . to accounts that stay on the books longer and think more of quality than of price.

CRANE'S FINE PAPERS • MADE IN DALTON, MASSACHUSETTS • SINCE 1801

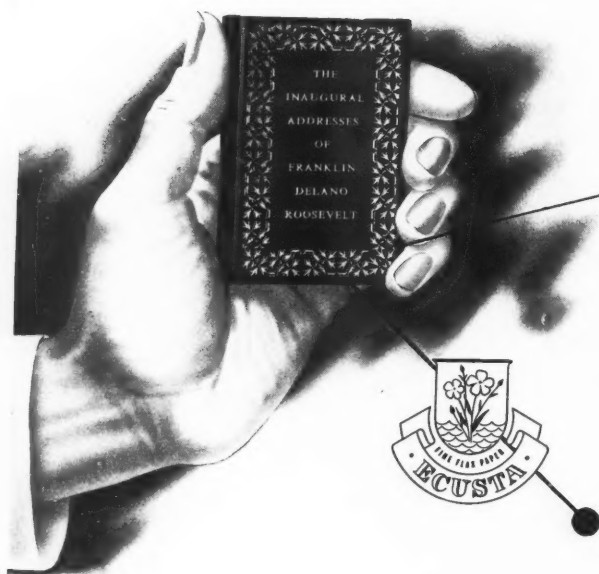
When Writing These Advertisers, Please Mention THE INLAND PRINTER

89

A MERRYMOUNT PRESS MINIATURE

Beautifully Printed On

ECUSTA *Fine Flax* BIBLE



Mr. John Bianchi of D. B. Updike, The Merrymount Press (Boston), printer of this distinctive miniature, published by A. J. St. Onge of Worcester, Mass., reports:

Having read Ecusta's advertising, we examined Ecusta Bible, substance 24 and selected it for this miniature edition of "The Inaugural Addresses of Franklin Delano Roosevelt."

Light — opaque — Ecusta Bible provides an exceptional background for fine typography. Use modern, distinctive, functional Ecusta Bible for keepsakes, diaries, date books and de luxe editions.

ECUSTA PAPER CORPORATION

PISGAH FOREST • NORTH CAROLINA

FINE FLAX AIR MAIL • FINE FLAX WRITING • BIBLE PAPER • SPECIAL MAKEREADY TISSUE • THIN PAPER SPECIALTIES

BASIC FACTS FOR OFFSET PLATEMAKERS

The start of a good offset job is a good plate and to make a good plate takes "know how". You can get this knowledge in a new booklet giving all the basic facts on offset platemaking. It's a step-by-step operating manual for any platemaker. It's FREE. Send for your copy TODAY. Use the coupon below.



**LITHO CHEMICAL
& SUPPLY CO., INC.**
63 PARK ROW, NEW YORK 7



LITHO CHEMICAL & SUPPLY CO., INC.
63 Park Row, New York 7, N. Y.
We're Offset Minded. We Want a Copy of Your Booklet.

Name _____ Title _____
Company _____
Address _____

SUPEREROGATE

...To do more than is required—to give you extra quality—is characteristic of Johnson Inks, and has been for 142 years.

CHARLES NEW Johnson AND COMPANY
GOOD INKS SINCE 1804

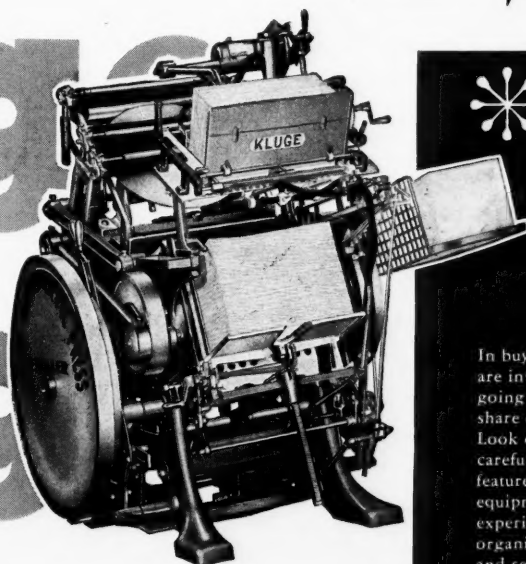
10th and Lombard Streets, Philadelphia, Pa.

New York • Chicago • Boston • St. Louis • Cleveland • Detroit
Baltimore • Kansas City • Pittsburgh • Atlanta • Dallas

REMEMBER THE

ABC

OF BUYING...



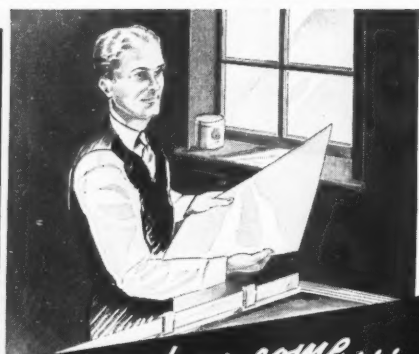
**ALWAYS
BE
CAREFUL**

In buying a printing press you are investing in something you are going to live with for a good share of your business life. Look over the entire market carefully. Compare feature by feature. Talk to users of the equipment. Investigate thoroughly the experience and background of the organization building, installing, and servicing such equipment.

Brandtjen & Kluge are the world's largest exclusive manufacturers of Automatic Platen Printing Presses and Automatic Platen Press Feeders. This equipment is built, installed, and serviced by them. If the purchaser is interested in a time-payment plan, the equipment is even financed by them. One sound and reputable organization is behind the entire transaction. Think twice and compare before buying any major piece of machinery.

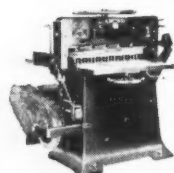
**BRANDTJEN &
KLUGE, INC.**
SAINT PAUL 3, MINNESOTA

Mr. Printer....



the time has come...
**WHEN YOU MUST
CUT PRODUCTION COSTS**

★ The installation of more efficient machinery is the logical way to tackle the problem—and **CHALLENGE** Equipment is the **ANSWER**. Place your orders at once for future delivery, as orders are being filled in the same rotation as received.



**Challenge Paper Cutters—
Safe, Accurate Cutting**

All models of the Diamond Power Cutter, Challenge Pony Cutter and Challenge Lever Cutter are of rugged construction yet easy to operate.

**Challenge Proof Presses—
Make Good Impressions**

The Series E Proof Press operates like a cylinder press. Mounted on handy all-steel stand. Clean, clear, faithful reproductions.

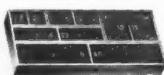


**Challenge Paper Drills—
Speed Up Production**

Easily Adjusted. Simple to operate. Do a wide variety of work. Step-up profits. All have a motor operated drill head that moves through the paper by hand lever, foot power or electro-hydraulic mechanism.

**Challenge Iron Furniture—
Labor-Saving—Long Lasting**

Allows fast, accurate and rigid make-up. Made in 120 standard sizes and 70 Mammoth sizes.



Challenge

THE CHALLENGE MACHINERY COMPANY

GRAND HAVEN, MICHIGAN

**PRESSROOM AND BINDERY
EQUIPMENT**

MANY LATE MODELS

★

AUTOMATIC CYLINDER UNITS
PAPER CUTTERS—LEVER AND POWER
LINOTYPES—INTERTYPES
FOLDERS AND STITCHERS
MANY OTHER ITEMS

★

**WANTED SINGLE UNITS
OR COMPLETE PLANTS**

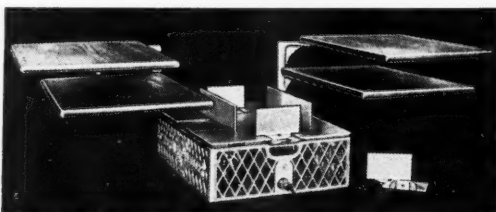
Particularly interested in buying large size single and two-color Miehle and Babcock Presses.

WRITE OR TELEPHONE FREMONT 5100

NORTHERN MACHINE WORKS

MARSHALL & JEFFERSON STS., PHILADELPHIA 22, PA.

**New Universal Jogger
Is Available NOW!**



CUTS COSTS ON GATHERING-JOGGING

● **SAVES ONE-THIRD THE TIME!**

The Universal Jogger saves at least one-third the time over the old hand method of gathering all kinds of forms printed in duplicate, triplicate, quadruplicate, etc. It not only does the work faster, but does it perfectly.

● **INEXPERIENCED HELP CAN DO WORK!**

Inexperienced girls can work fast and efficiently with the Universal Jogger. They simply drop the sheets between the "jogging" sides—the machine arranges them smoothly and evenly. The jogger therefore releases your experienced help for other productive work.

● **JOGS SHEETS 5 x 8 TO 19 x 24! Attachment can be had to take sheet 19 x 28.**

Gathering and jogging of all jobs made economical. Extra shelves may be added on unusually large jobs. Labor savings pay for machine in short time. Many enthusiastic users. Investigate now

Write for prices and further information—

UNIVERSAL JOGGER CO., Inc.

322 South Fourth St.

Minneapolis 15, Minn.

SALESMEN

with flying carpets



...made by **SORG!**

One hundred thousand sales calls in a single day!

Impossible? Not when printed advertising carries the sales message to prospective customers!

When the coming competitive scramble for markets begins in earnest, the greatest need in merchandising will be that of reaching prospects quickly and effectively with a complete selling story.

Printed advertising will tell the story . . . paper will provide the "flying carpet" that will transport the advertiser's message to thousands . . . hundreds of thousands . . . even millions—almost overnight.

To provide the quantity and the quality of fine printing papers required to do this tremendous selling job, Sorg has been planning and preparing new facilities and methods. Now, as for the past 94 years, printers and paper fabricators can still look to Sorg for the best in paper.



SORG STOCK LINES: WHITE SOREX • CREAM SOREX • EQUATOR OFFSET • EQUATOR INDEX
BRISTOL • VALLEY CREAM POST CARD • MIDDLETOWN POST CARD • No. 1 JUTE DOCUMENT •
BUCKHIDE TAG • FOR CONVERTING USE: DBL (Double Bleached Lined) • DIP (Dyed-in-pulp).

THE SORG PAPER COMPANY • Middletown, Ohio

Offices: NEW YORK OFFICE: 370 Lexington Ave. (17). CHICAGO OFFICE: Daily News Bldg. (6).
Representatives: BOSTON, C. H. Dodge, 10 High Street (10). LOS ANGELES, N. L. Brinker, 409 E. 2nd
Street (12). ST. LOUIS, H. E. Bouis, Ambassador Bldg. (1). **Member:** Miami Valley Paper Shippers' Association.

For Items Not Advertised, Write THE INLAND PRINTER'S "Readers' Service"

LAPP'S new DUO PLATE SOLUTION

for ZINC and ALUMINUM



FOR PLATE MAKING DEPT.

1 OZ. DUO PLATE SOLUTION

3 OZ. WATER (GUM IS OPTIONAL)

This makes a full strength solution for zinc and aluminum.

Apply solution with sponge or brush, making sure the surface of the plate is entirely covered. It is not necessary to wash off the solution, just gum down plate and dry thoroughly.



FOR THE PRESS ROOM

STOCK: 1 OZ. DUO PLATE SOLUTION

3 OZ. GUM SOLUTION, 14° BAUME

Mix 2 oz. stock in one gallon of water. This will give you an equivalent of 3.8 P.H. fountain solution.

You can mix any amount in advance, as it will not turn sour or lose its strength. This is a plate desensitizer and not an etch. It will not cause a film to accumulate, thereby keeping the grain on the plate open for longer runs. It is harmless to the Flannel and Molleton on Dampening Rollers. It will keep the Brass Water Fountain Roller free from all scum and ink. It will not strip the Steel Ink Roller.

J.H. & G.B. SIEBOLD, Inc.

"OVER HALF CENTURY OF SERVICE"
MANUFACTURERS OF

PRINTING — **INKS** — LITHOGRAPHIC

AND SUPPLIES
EVERYTHING FOR THE LITHOGRAPHER



101 SIXTH AVE., NEW YORK 13, N.Y.

TELEPHONES: WALKER 5-5565-66-67-68

for Smooth, Clean Cuts — More Cuts Between Grinds



Precision

Paper Knives

1 Super-Keen—Perfected .002" concave bevel—making for extra sharpness without weakening edge.

2 Accurate—Less than .001" variation throughout knife length—insures smooth, clean, straight cuts.

3 Free Clearing—Precision ground .003" concave face with .006" tapered back—eliminates binding or dragging even on deep lifts.

4 Long-Lasting—Special tool steel cutting edge heat-treated by a process which combines hardness with toughness—to give maximum number of cuts between grinds.

For Quotations Write

SIMONDS WORDEN WHITE CO

606 Negley Place • Dayton, Ohio

AIRPORT



Attention

It attracts the eye like the main ring in a circus tent. A whispered message can increase its tempo of attention, if the type used is

Airport Black

Series No. 702, in sizes from 14 to 72 point, for immediate delivery. 8-10-12 point available in the very near future.

CONSULT THE DEALER IN YOUR CITY OR
WRITE DIRECT TO

Baltimore Type

Executive Office and Foundry
15-17 S. Frederick Street Baltimore 2, Md.



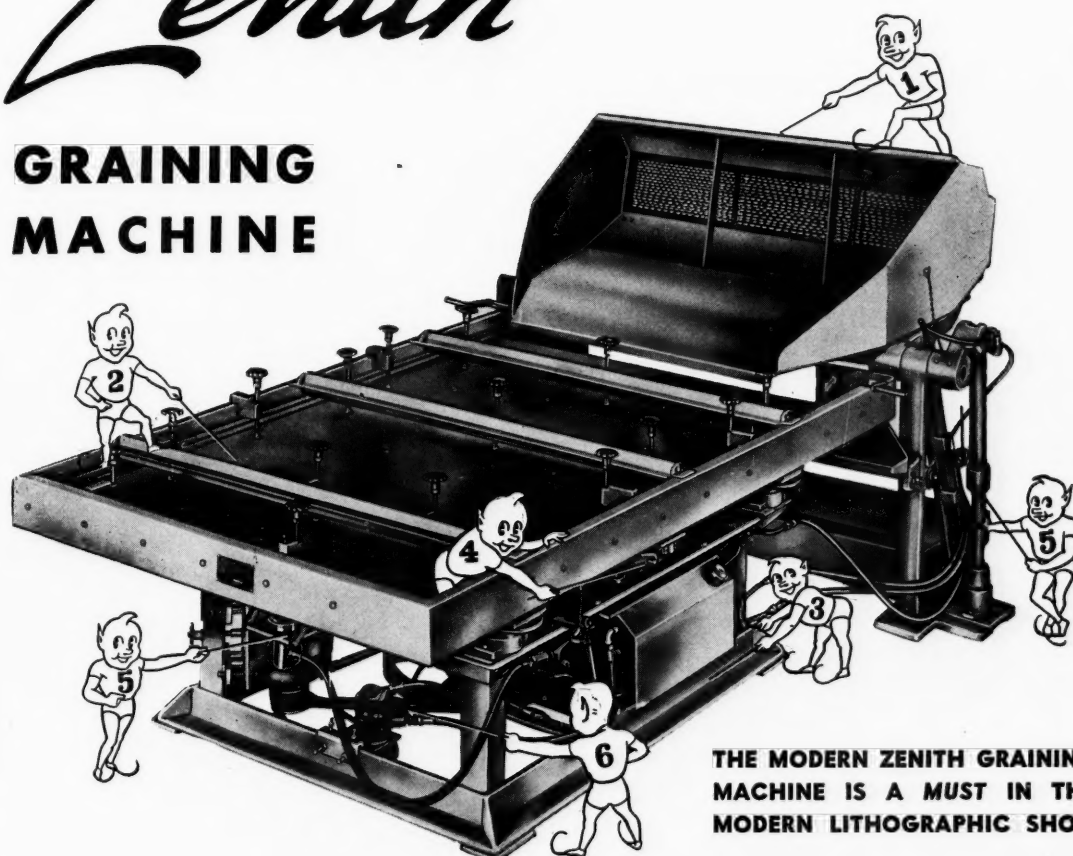
BLACK

AN EXCLUSIVE BALTOTYPE FACE

Introducing the New Improved—1946

Zenith

GRAINING MACHINE



**THE MODERN ZENITH GRAINING
MACHINE IS A MUST IN THE
MODERN LITHOGRAPHIC SHOP.**

1. **THE AUTOMATIC DUMPER** removes the word *labor* from the vocabulary of the plate grainer.
2. **THE TUB**—doubly reinforced—sized to meet your plate requirements with maximum efficiency and economy.
3. **THE BASE**—heavy structural steel construction.
4. **DIAMOND FRAME**—guarantees equalized motion of the tub insuring uniformity.
5. **HYDRAULIC RAMS**—under the tub to tilt tub while oscillating, to remove balls from grained surface on automatic dumper, and to load balls into the machine for the graining operation.
6. **HYDRAULIC PUMP**—supplies the hydraulic pressure for the operation of the hydraulic rams.

For additional information concerning this or other Zenith products, please address inquiry to

Zarkin Machine Co., Inc.

335 East 27th Street

New York City

Manufacturers of Zenith lithographic equipment

SEASON OF GROWTH

In the ten seconds it takes you to read this sentence, 450 feet of paper and paperboard are rolling from West Virginia Pulp and Paper Company's machines in widths that might easily span a city street. This rapid stream of Westvaco paper production flows continuously 24 hours daily. It is a day-in, day-out miracle of Westvaco papermaking.

Even this prodigious output of Westvaco products cannot meet every demand in a world hungry for fine papers. Nevertheless, the entire resources of West Virginia Pulp and Paper Company are directed at meeting the many paper needs of the printer, the publisher, the advertiser, and the packaging merchandiser as speedily as conditions permit. New machinery . . . war veterans returning to their old jobs . . . expanding facilities—these are some of the reasons why prospects for increasing the availability of Westvaco paper stocks grow brighter.

During this season of growth, keep your weather-eye peeled for new and timely ideas in print. Get your copy of Westvaco Inspirations for Printers No. 158 . . . it's a pleasant-to-take Spring tonic that will add zest to your plans and vigor to your imagination. Write or phone one of the addresses listed below and a copy will be sent to you.

THE COVER ARTIST • Adolph Dehn, born in a small town in Minnesota, studied at the Minneapolis School of Fine Arts and later at the Art Students League of New York. He spent many of his early productive years in Europe, and on his return to this country in 1931 his reputation was already well established. Dehn was one of the group of artists employed by the U. S. Navy to depict its air warfare activities. Examples of his work are included in the collections of many of our leading art museums.



WEST VIRGINIA PULP AND PAPER COMPANY

NEW YORK 17: 230 PARK AVENUE
CHICAGO 1: 35 E. WACKER DRIVE
PHILADELPHIA 6: PUBLIC LEDGER BUILDING
SAN FRANCISCO 5: 530 MARKET STREET



SPRING IN CENTRAL PARK: By Adolph Dehn • Courtesy of Metropolitan Museum of Art, New York

WESTVACO

INSPIRATIONS FOR PRINTERS • NUMBER 158



Nice looking, sure. And good printing, too, which is the big point. The machine operators, make-up men and stonehands know their stuff when it comes to spotting print-worthy type and slugs. But the pay-off is on the press. How will it print? Well-cast Blatchford Metal prints clean and sharp, and it stands up.

★

NATIONAL LEAD COMPANY

Baltimore • Chicago • Cincinnati • St. Louis

E. W. BLATCHFORD COMPANY • New York

MORRIS P. KIRK & SON, INC. • Los Angeles

AMERICAN LEAD CORPORATION • Indianapolis

LINOTYPE • MONOTYPE

INTERTYPE • LUDLOW



SPEEDS ALL MECHANICAL PHASES OF PRESS WORK

Chapman Static Neutralizer, absolutely safe, simple—no moving parts—eliminates static under any weather conditions, at any time of year, in any climate. Fully guaranteed.

Presses can be speeded up

Feeding is aided: Sheets will not crumple or miss

Sheets are delivered without clinging to strippers and guides

Sheets will not stick to the pile, and are readily jogged

Reduces fire risk on gravure presses

No pressroom complete without it.

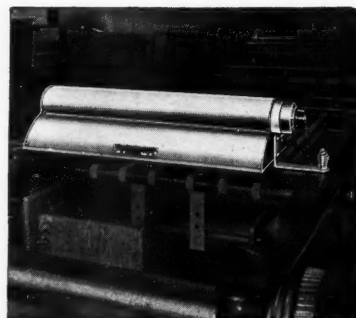
For all flat bed and rotary presses
Letterpress—Offset—Gravure

★ IN WORLDWIDE USE FOR FORTY YEARS ★

CHAPMAN ELECTRIC NEUTRALIZER CO.

BOX 268, PORTLAND 6, MAINE

Doyle equipment on Kelly Presses has given an excellent account of itself for many years.



FOR PRODUCTION AND PROFIT . . .

THE DOYLE *Open Glow* INFRARED DRYER

(THE DOYLE ELECTRIC SHEET HEATER)

For all makes of printing presses and folding machines. Dries ink quickly, Higher speeds, faster deliveries, more jobs. Saves time waiting to back up; saves slip-sheeting. No static, rapid handling; perfect jogging, less spoilage. No flames; less fire hazard, purer air. . . The Doyle Infrared Dryer is standard equipment on well known presses; has been used successfully for many years. Substantial, efficient, finest materials and workmanship.

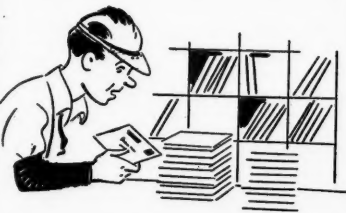
GET OUR DESCRIPTIVE LITERATURE

THE J. E. DOYLE COMPANY

MANUFACTURERS OF DOYLE VACUUM SHEET CLEANER, DOYLE'S SETSWELL COMPOUND, DOYLE'S LIQUID STATIC DESTROYER.


1224 WEST SIXTH STREET • CLEVELAND 13, OHIO

BETTER PRINTING • MORE PROFIT




1. How many variations of "Instructions to Postmaster" are authorized for printing on the face of an envelope to be mailed Third Class?

A. 2 ☐ C. 12 ☐
B. 5 ☐ D. ☐



2. How many processed letters, each identical in processed content, must be in a mailing to earn the regular Third Class Postage Rate?

A. One ☐ C. 50 ☐
B. 20 ☐ D. 200 ☐



3. What type of envelope must have a return address printed on the face?

A. Window envelope ☐ C. Baronial ☐
B. Postage saver ☐ D. Booklet ☐

Do Printers' Customers ever ask Questions like these?



Nobody could answer *all* the questions a printing customer might ask while planning a mailing, or packaging a product, or starting a Business System . . . not without some help.

Take envelopes for example: a man would have to know all about types, sizes, materials, colors, Postal Laws and Regulations . . . literally hundreds of facts.

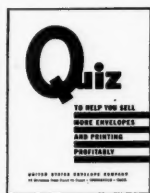
Of course, he'd be a good man to know. His customers would call him in to help them *plan* their jobs. He'd be on the inside, able to take his pick of the best ones.

You Can Have the Answers

You . . . or any one of your salesmen . . . can be the man who gets the business, by using the U.S.E. Envelope Analyzer Kit. It's an *Envelope Encyclopedia* — authoritative, clear, compact, easy to use. It will help you get more — *and more profitable* — printing business.

Conduct Your Own Quiz Program

Your men will be more apt to read and use the U.S.E. Envelope Analyzer Kit if you show them what it can do for them. This you can do by giving them the U.S.E. Envelope quiz. It's stimulating — it's fun! To get it just clip the coupon — fill in the number of Quiz Folders you can use, and we'll send them to you with the answers, and an equal number of copies of the new U.S.E. Analyzer Kit — all free and postpaid. E-59p



Answers: 1: C-12
2: B-20; 3: A-Window Envelope

UNITED STATES ENVELOPE COMPANY
Springfield 2, Massachusetts

Send me _____ copies of your Quiz Folders with an Answer Card, and an equal number copies of the new U.S.E. Envelope Analyzer Kit — all free and postpaid.

Name _____ Title _____

Company _____

Address _____

U.S.E. ENVELOPES

Your 3-Fold Business Partner



MAILINGS



PACKAGING



SYSTEMS

When Writing These Advertisers, Please Mention THE INLAND PRINTER

INSURE Better PRESSWORK with "33" INK CONDITIONERS ...and Increase Profits



For the best results, condition your inks with "33" . . . It improves the printing qualities of all inks. No experimenting is necessary. Add "33", according to simple directions, and avoid most of your ink troubles.

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Try "33" Ink Conditioners NOW . . . You can't lose. Write for free copy of "To The Pressman."

100% GUARANTEE

8-lb. TRIAL ORDER. If our Ink Conditioners do not satisfy you completely, return the unused portion at our expense. Further order filled through local jobbers. Specify "33" for letterpress—"0-33" for litho and multilith

Los Angeles • San Francisco • Dallas • Houston • Oklahoma City • Miami
Orlando • Tampa • Jacksonville • Tallahassee • Charlotte • Knoxville
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Export Div.: Guiterman Co., Inc. 36 S. William St., New York 4, N.Y.

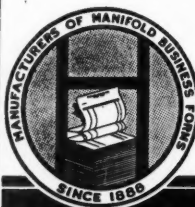
Central COMPOUNDING COMPANY
1718 North Damen Avenue, Chicago, Illinois
IN CANADA—JES. CANADIAN FINE COLOR CO. LTD., TORONTO

One-Time CARBON PAPER

Check these prices . . . excellent deliveries . . . write for samples and join the many printers who already have standardized on HANO ONE-TIME CARBON PAPER.

BLACK OR BLUE

REAM SIZE	PRICE PER REAM
22" x 34"	\$4.50
26" x 39"	\$6.00



MINIMUM ORDER TEN REAMS,
ONE SIZE. PRICES F. O. B.
HOLYOKE, MASS.

PHILIP HANO COMPANY
INCORPORATED
HOLYOKE, MASS.

Book and Catalog Bindings Tailored to the Job!

BROCK and RANKIN—concentrating entirely on binding Books and Catalogs—understand customers' needs, know how to select suitable materials and to tailor the binding to the individual job.

BROCK and RANKIN

*Book and Catalog Binding
For More Than Fifty Years*

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Robot Day



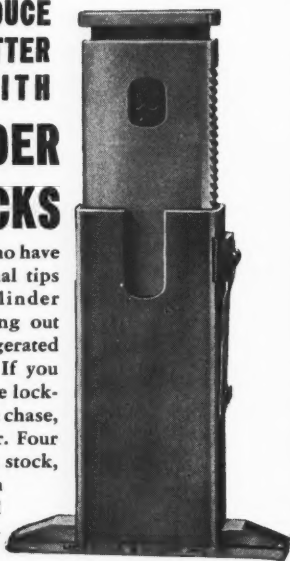
This watermarked 100% sulphite bond enables him to turn out A-1 jobs when the call is for letterheads, billheads, statements and other office forms. Besides taking letter press and offset-lithography printing exceptionally well, it offers an ideal surface for typing or longhand—pleasing the customer on every count.

teammate ADIRONDACK LEDGER, are not yet plentiful enough to supply all who want these outstanding papers. As the world's largest maker of papers, we're doing everything we can to expand available quantities. International Paper Company, 220 East 42nd Street, New York 17, N. Y.



SAVE TIME, REDUCE COSTS, GET BETTER PRINTING WITH CYLINDER PRESS LOCKS

Those wise printers who have accepted our occasional tips to try the M&W Cylinder Press Locks are finding out that we have not exaggerated their virtues one bit. If you want a safe and positive lock-up inside or outside the chase, this lock is the answer. Four sizes are available from stock, 3", 5", 8" and 14" which extend to 5", 8", 14" and 26". We're glad to answer inquiries.



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MANUFACTURING COMPANY
DEPT. 1, MIDDLETOWN, N. Y.
PRINTER'S SUPPLIES SINCE 1878

KEEP IN THE RACE WITH CHAMPION BLACKS

- ★ Champion Halftone
- ★ Champion Super
- ★ Champion Book

As well known in the printing trades as are the heroes of fiction and fact —our Champions are champions in fact, not fiction. Prove to yourself their dependable performance.



Sinclair and Valentine Co.

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Birmingham Charlotte Dallas Havana Kansas City Miami New Haven New Orleans
Chicago Dallas Denver

TIPS ON SELLING GUMMED PAPERS ... from McLaurin-Jones



INFORMATIVE LABELING

During war years, little thought was given to informative labeling. Manufacturers had too many other problems, and too little merchandise, to give it much thought. Now, with markets to be regained, with increased stocks and more competitive selling, many manufacturers are reviewing the label situation... will make more use of new informative labels, or improve old ones. In either case, there's business waiting for you. Your McLaurin-Jones Guaranteed Flat Gummed Paper merchant will be glad to help!



McLAURIN-JONES
COMPANY

304 MacLaurin St., Brookfield, Mass.

Offices: New York • Chicago • Los Angeles



COMBINATION FOR PERFECTION!

Good copy, fine printing...deserve
top quality blanks...**FALPACO!**

What's the use of your clients spending money to buy the best art work, plates and printing if all the expense and care are to be nullified by the use of blanks of mediocre quality?

There's *NO* reason, of course!

Few printers would make that mistake. Most of them make sure of getting the top quality combination — art — printing — and FALPACO coated blanks.

Naturally everybody wants FALPACO coated blanks. However, the demand has increased to the point where we cannot give our customers all they require when they want them. To take care of this growing demand, we are increasing our production by adding new equipment and additional personnel.

Distributed by Authorized Paper Merchants from Coast to Coast



FALULAH

PAPER COMPANY

NEW YORK OFFICE—500 FIFTH AVE. N. Y., 18 • MILLS—FITCHBURG, MASS.

For Items Not Advertised, Write THE INLAND PRINTER'S "Readers' Service"

103

MORRILL *Inks*

Manufacturing newspaper and commercial inks has been Morrill's business for over a century. The careful formulation and exacting production of Morrill inks of all types assure uniform quality and performance. Consult the Morrill office nearest you on your next printing ink problem.

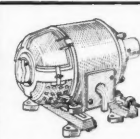


GEO. H. MORRILL DIVISION
SUN CHEMICAL CORPORATION
100 SIXTH AVENUE, NEW YORK 13, N. Y.

Factories: TACONY, PHILA., PA. CHICAGO, ILL.
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KIMBLE

CUSTOM-BUILT MOTORS



FINE CUSTOM-BUILT MOTORS
FOR THE GRAPHIC ARTS
INDUSTRY SINCE 1904

KIMBLE ELECTRIC

Division of Miehle Printing Press & Mfg. Co.

2005 WEST HASTINGS STREET
CHICAGO 8, ILLINOIS

DISTRIBUTED BY: AMERICAN
TYPE FOUNDERS

tags

20 STOCK COLORS IN A DOZEN GRADES AND WEIGHTS
PLAIN TAGS made single, gangs, continuous strips; brass eyelets, numbers, perforations; slits, scoring, holes and slots.
PRINTED TAGS in one or more colors, one or both sides; numbered, with strings, wires, hooks, bars or deadlock fasteners attached; or separate.
ALL SIZES: standard, special or oversized in manila, sulphite, jute, rope, cloth.
DIE-CUT TAGS, printed in multiple colors, strung, packed in plain boxes.
STOCK AND SPECIALTY TAGS:

SOLD TAGS	SHIPPING TAGS	WATCH REPAIR TAGS
REPAIR TAGS	ALTERATION TAGS	TAG ENVELOPES
BAGGAGE TAGS	PRODUCTION TAGS	RECEIPT ENVELOPES
MARKING TAGS	STRING PRICE TAGS	FLORIST TAGS
NUMBERED TAGS	SPECIAL SALE TAGS	FLORIST ENVELOPES

STRINGING **CONVERTING**

LET US QUOTE YOU ON
 STRINGING your straight-cut or die-cut booklets, pamphlets, folders or cards. Punched and strung, tied in 100's and boxed.
 CONVERTING of your plain or printed stock: patching, eyeletting, corner-cutting, stringing, wiring, etc.

Please mention this publication when writing.

STANDARD TAG CO.
 ESTABLISHED 1925
 TAG MAKERS AND STRINGERS TO THE TRADE
 MODERN FACTORY AT:
 65 DUANE STREET, NEW YORK 7, N. Y.
 Bot. Broadway & Lafayette St. Tel. WOrth 2-3296
 COPYRIGHT 1946 STANDARD TAG CO.

Revolutionary NEW Printing Ink!

WINK-DRI

Dries Within Seconds

ON COATED STOCK WITHOUT HEAT OR SPRAY

RUSH jobs that used to require hours can now be backed up at once.

Sheets can be cut within 1 minute after printing **WITHOUT OFF-SETTING**, and without the expense of heat, spray or slip-sheeting. On uncoated stock (Bond, Ledger, etc.) Wink-Dri dries in one to fifteen minutes.

You save money with WINK-DRI. Its high bulk and color strength means you use less of it than with ordinary inks. Also losses due to skinning are completely eliminated, no matter how long the container is left open.

Inks come in black and colors (including process colors which will trap and dry within seconds without crystallization). Order yours now.

Distributors wanted in exclusive territories.

F. G. OKIE, INC.

247 S. 3rd Street, Philadelphia, Pa.

"WINK-DRI DRIES QUICK AS A WINK"

The rush is on for

**NEW ERA
Multi-Process
PRESSES**

..and we're

rushing to meet the demand

The many printers who placed orders months ago—and many who plan to place orders—will be glad to know that New Era Multi-Process Presses are becoming more available every day. Expanded manufacturing facilities and added manpower are gradually reducing the backlog of orders.

Some of the well-known advantages of New Era Presses: Speeds up to 8,000 impressions per hour. Prints on any kind of stock that can be fed from a roll. Handles various combinations of finishing operations on labels, checks, tags, tickets, booklets, unit-sets, forms, book match covers, folders, package inserts, etc. New Era Presses mean greater efficiency and profits on general commercial printing or specialty items.

Orders for New Era Presses are filled in accordance with date of receipt. If you look forward to receiving a New Era Press "as soon as possible," you should place your order "as soon as possible."

NEW ERA

MANUFACTURING CO., 373 11TH AVE., PATERSON 4, N. J.
MULTI-PROCESS PRESSES AND ALLIED EQUIPMENT

Ⓜ 1090

When Writing These Advertisers, Please Mention THE INLAND PRINTER



**From the waist up
this man is a
fine investment!**

IT'S the "know-how" in his head and the skill in his hands that enable him to earn profits for you. When he uses his legs and feet, hunting for leads, slugs, rule, sorts and spacing materials, down goes his production and up go your costs.

Hamilton Equipment helps him keep production up, and costs down, by saving costly footwork . . . makes it possible for every compositor to have an ample supply of constantly needed materials in easy reach.

Hamilton Equipment helps to keep down overhead also . . . saves expensive floor space in the composing room by providing maximum working and storage capacity in minimum floor area.

Can you use some helpful suggestions for rearranging your composing room for better production? Write us, or ask your Hamilton dealer, for a free copy of the booklet, "Clean House for Profits," including layout sheet and miniature illustrations to scale of composing room equipment so you can make your own experimental layouts.

HAMILTON

MANUFACTURING COMPANY

TWO RIVERS, WISCONSIN

105



LET
SOUTHWORTH
HELP YOU

LET Southworth help you in making your plans for extra Business and extra Profits. Get the increased production and lower costs made possible by SOUTHWORTH'S new improved "Graphic Arts Machines."

In the future, as in the past, SOUTHWORTH will continue its leadership in the manufacture of Graphic Arts machinery. During the entire war period our research department was busy developing new SOUTHWORTH models that do the job quicker, better, more economically.

WRITE FOR COMPLETE INFORMATION

SOUTHWORTH
MACHINE COMPANY

MFR'S: PAPER CONDITIONERS, UNIVERSAL JOGGERS, HUMIDIFIERS, PUNCHING and CORNERING MACHINES, ETC.

30B WARREN AVENUE, PORTLAND, MAINE

QUALITY
INSURES
PRODUCTION



Triangle

Ink & Color Co., Inc.

305 EAST 45TH STREET
NEW YORK 17, N. Y.

THE RATHBUN
& BIRD COMPANY, INC.

IN BUSINESS SINCE 1898

Machinists

FOR LITHOGRAPHERS • PRINTERS

PLANTS MOVED REPAIR SERVICE
MACHINES RECONDITIONED

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ENGDAHL BINDERY
EDITION BOOK BINDERS

"Books Bound by Us Are Bound to Satisfy"

1056 West Van Buren St., Chicago, Ill.

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ROUND OR FLAT

The Seneca Wire & Mfg. Co., Fostoria, Ohio

Ideal Rollers

GRAPHIC • INKMASTER (VULCANIZED OIL)

Economical ★ Efficient ★ Dependable
Ideal Graphic form rollers and Ideal Inkmaster (vulcanized oil) distributors will keep your letterpresses producing high-quality work at production speeds in any kind of weather.

IDEAL ROLLER & MANUFACTURING CO.
Chicago 8, Illinois • Long Island City 1, N.Y.

AMSCO CHASES

ELECTRIC-WELDED • SQUARE AND TRUE • ABSOLUTELY GUARANTEED
SOLD BY ALL DEALERS

AMERICAN STEEL CHASE COMPANY

31-31 Forty-Eighth Avenue, Long Island City, New York

INKS

FOR SHARP IMPRESSIONS
in Litho-Offset and Printing
FOR METAL DECORATING

Get Varnishes and Dryers, too, from Gaetjens, Berger & Wirth, Inc.
35 YORK ST., BROOKLYN, N. Y., • 538 S. CLARK ST., CHICAGO



..... everything from **SOUP to NUTS!**

A COMPLETE SOURCE OF ENVELOPE SUPPLY

The Justrite Line
ENVELOPES

Offering The Stationer a complete source of supply for every Envelope need—a factory where the Unusual becomes the Usual—years of solving Envelope problems.

These are the things which enable us to offer you a wide variety of Envelope Specialties, for both over-the-counter sales and for customer needs. The "Justrite Line" has been "Custom Built" around the specialized envelope and container needs of Stationery customers—that's why your difficult jobs are welcomed.

Look over the following list of Specialties, developed for the Stationery Store field. These are only a few of the items that we either stock or can run on order:

- **WATERPROOF ENVELOPES**—for Packing Lists, Shipping Papers—protect from moisture, acids and grease.
- **BANKERS FLAP ENVELOPES**—A complete line of Bank Envelopes for mailing, filing, handling currency and coupons.
- **CURRENCY GIFT ENVELOPES**—Engraved money holders for Card Counter sale and for Bank Holiday use.
- **WAR BOND JACKETS**—Seven distinct styles for general and industrial uses.
- **SAF-KEEP ENVELOPES**—Claim Check envelopes with numbered tabs widely used by Hotels and Public Gathering places.
- **FILING ENVELOPES**—available Open End, Open Side, Flat and Expanding.
- **TAMPERPROOF or Safety Express ENVELOPES**—for sending Registered Mail and currency.
- **ZEPHYR WEIGHT AIRMAIL ENVELOPES**—a modern design, light weight, rag content envelope.
- **LIBRARY BOOK POCKETS**—Six styles for every library need.
- **TRANSPARENT POLICY JACKETS**—also other styles of regular and window style jackets available.
- **PAYROLL ENVELOPES**—an Industrial need used by all factories.
- **REPORT CARD POCKETS** — **PASS BOOK COVERS** — **BARONIAL ENVELOPES.**
- **CLASP ENVELOPES** — **CATALOG ENVELOPES** — **COIN ENVELOPES.**

Available either printed to your copy or plain. Write for prices and samples today and send in that unusual or difficult envelope problem for prompt consideration.

NORTHERN STATES ENVELOPE COMPANY

• St. Paul 1, Minnesota
• Chicago 4, Illinois



FOR PADDING AND BINDING

FLEXBOND
A NEW ADHESIVE

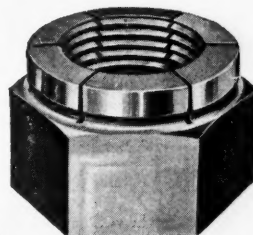
**EASILY APPLIED • SETS FAST
PERMANENT FLEXIBILITY
CUT PADS IN 15 MINUTES
RELEASES SHEETS WITHOUT TEARING
READY MIXED • NO STIRRING
NOT AFFECTED BY COLD WEATHER
BRUSHES CLEAN IN WATER**

ORDER TODAY... If your Paper Merchant cannot supply you, send us his name with your request for a FREE SAMPLE.

JOBBER TERRITORIES OPEN — Write Today

The SPECIAL CHEMICALS Co.
1545 EAST 18th STREET • CLEVELAND 14, OHIO

Here's a Lock Nut
that
really
holds!



Pat'd & Pat's Pend.

FLEXLOC

Search no more... This all-metal one-piece "Flexloc" Stop and Lock Nut has every desirable feature. Just look them over:

- ✓ It is of one-piece construction
- ✓ It can be made of any of the conventional nut materials
- ✓ Every thread—including locking threads—takes its share of the load
- ✓ Its construction is especially advantageous

for maximum strength and dependability of low and thin nuts
✓ It accommodates itself to a very wide range of thread tolerances
✓ It can be used over and over again without losing its ability to lock
✓ It is not affected by temperatures likely to be met within the field of Mechanical Engineering
✓ Being a "stop" nut, it stays locked in any position on a threaded member

Sizes from No. 6 to 1" in diameter; millions in use. Write for Bulletin 582.



The famous "Unbrako" Socket Screw Products are also made by us. See our exhibit in Booths 326-328, at the A. S. T. E. New Era Exposition, in Cleveland, April 8-12.

STANDARD PRESSED STEEL CO.
JENKINTOWN, PENNA., BOX 740

Boston • Chicago • Detroit • Indianapolis • St. Louis • San Francisco
OVER 43 YEARS IN BUSINESS

Please Mention THE INLAND PRINTER When Writing to Advertisers

107

PRINT SUPERLATIVE LABELS STICKERS AND SEALS *with..*

DEPENDABLE, SMOOTH TROJAN "SUPER-FLAT" GUMMED PAPERS



Printer and customer both take pride in the finer labels, stickers and seals produced from TROJAN "SUPER-FLAT" GUMMED PAPERS! A superior, smoother printing surface assures printers better jobs, printed more easily . . . and greater customer satisfaction! And . . . TROJAN "SUPER-FLAT" GUMMED PAPERS encourage printing at top speed with minimum interruption! We have a distributor in your territory. Write for his name and address, today!

THE GUMMED PRODUCTS COMPANY

OFFICES ★ TROY, OHIO ★ MILLS

Chicago • Cincinnati • Cleveland • Los Angeles
New York • Philadelphia • St. Louis

"When you think of gummed products think of GUMMED PRODUCTS"

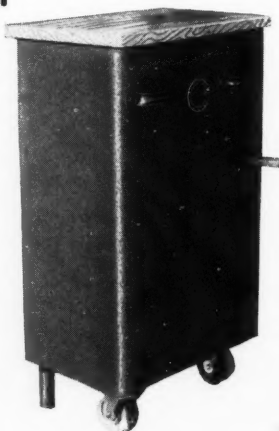
SYNTRON



"VIBRATING"

PAPER JOGGERS

Do a Better Job, Faster!



Handling all types of stock from onionskin to heavy board.

Table models and floor models.

The floor models are equipped with casters to permit easy moving from one department to another.

Write for literature

SYNTRON CO.

575 Lexington
Homer City, Pa.

So much depends on the RIGHT light
Be sure your photo arc lamps are

MACBETH'S

SEND FOR OUR LATEST CATALOG

MACBETH ARC LAMP CO. PHILA. 30, PA.

THEY'RE BETTER-THAN-EVER!

EMBOSSOGRAPH Powders & Inks for beautiful RAISED PRINTING EFFECTS. All varieties of Metallics & Neutrals for Flexible and Permanent results. WRITE FOR DESCRIPTIVE PRICE LIST.

THE EMBOSSOGRAPH PROCESS CO., INC.

251 WILLIAM STREET

NEW YORK 7, N. Y.

ROTARY PRESSES

for Lithographers, Printers, Newspaper Publishers. Also Presses for Folding Box Manufacturers. Tell Us Your Requirements

WALTER SCOTT & CO., INC., PLAINFIELD, N. J.

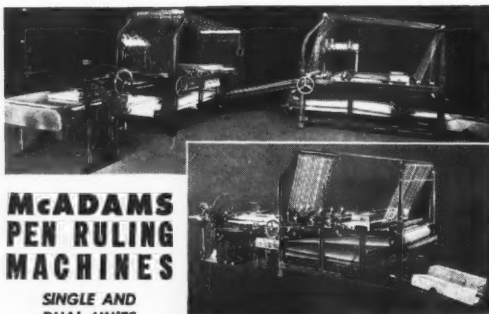
STEWART'S EMBOSSEING BOARD

Makes Embossing Easy

Needs no heating or melting—Simply wet it, attach it to tympan and let press run until dry. Sheets 5 3/4 x 9 1/4 inches \$1.25 a dozen, postpaid.

Instruction with each package.

THE INLAND PRINTER COMPANY
309 W. Jackson Blvd., Chicago 6, Illinois



McADAMS PEN RULING MACHINES

SINGLE AND
DUAL UNITS

WRITE FOR BULLETIN 110 CONTAINING
INFORMATION ABOUT THE POINT SYSTEM **FREE**

McADAMS PEN RULING MACHINES BUILT FOR MAXIMUM PRODUCTION

The new McAdams Royal Rulers attain a speed of 5000 sheets per hour, producing beautiful, quality ruling at a minimum cost of operating.

Dependable and easy to operate by remote control and at variable speed. Designed and perfected by McAdams engineers for long and satisfactory service. All metal frame, modern plastic beams, ball bearing and many exclusive patented devices.

JOHN McADAMS & SONS, Inc.

20-22 KNIGHT STREET

NORWALK, CONN., U.S.A.

ESTABLISHED 1842

"A PEN RULING MACHINE FOR EVERY PURPOSE"

CLASSIFIED BUYERS' GUIDE

BRONZING MACHINES

• **MILWAUKEE BRONZERS**—for all presses. Some rebuilt units. C. B. Henschel Mfg. Co., Milwaukee, Wis.

BUSINESS OPPORTUNITY

• **ALL OR PART INTEREST IN LONG** established library bindery business with large back orders on hand. Owner forced to sell on account ill health. Please do not apply unless you know bookbinding thoroughly and are blessed with at least \$5000 cash. Address by mail only, 941 Quebec Street, Denver 7, Colorado.

CALENDARS AND CALENDAR PADS

• **WHOLESALE** Calendars for the printer. Do your own imprinting. Few calendar salesmen are on the road now. Be the first in the field—which means more calendar sales for the printer. **FLEMING CALENDAR CO.**, 6540 Cottage Grove, Chicago 37, Illinois.

• **CALENDAR PADS**—67 Styles and Sizes. Write for catalog. Calendar backs for advertising, sheet pictures. **Wiebush Calendar Imptg. Co.**, 109 Worth St., New York, N. Y.

CLEANER

speed-clean
Fine Screen—Deep Etched
HALFTONES
with
ERADICOL
THE ALL-PURPOSE CLEANER

Instantly dissolves the most obstinate dried inks—Scientifically formulated to speed-clean type, plates, press rollers, hands, etc.—Quick drying, no oily residue and it costs less. Write Dept. D3 for free quart sample today.

PIERCE & STEVENS, INC.
710 OHIO STREET
BUFFALO 3, N. Y.

ENGRAVED STATIONERY

• **WEDDING INVITATIONS** and other engraved stationery of fine quality. **Siegrist Engraving Co.**, 924 Oak St., Kansas City 13, Mo.

EQUIPMENT WANTED

• **WANTED:** 22x34 or larger Harris off-set press. Advise type of feed, delivery and best cash price. **Madison Company**, 307 West Congress St., Detroit 26, Mich.

• **USED PERFECT PRINTING PRESS.** Write Box A-911, % The Inland Printer, 309 W. Jackson, Chicago, Illinois.

• **OLD LARGE PRINTING PRESS.** Automatic Feeder. Write Box A-912, % The Inland Printer, Chicago, Illinois.

• **USED ROTARY Four Color Printing Press.** Write box A-910, % The Inland Printer, 309 W. Jackson, Chicago.

FOLDERS

BAUM FOLDERS

WORLD'S GREATEST FOLDING MACHINE VALUES

★

RUSSELL ERNEST BAUM

615 CHESTNUT STREET, PHILADELPHIA, 6

(Continued on next page)

FOR SALE

FUNK 8-COLOR WEB PERFECTING PRESS



Front end of Press. Delivers 9½ x 12½ inch calendars complete, or 6¾ x 9½ booklets ready for trimming.

Increase your production and cut your costs with this press. This press has regularly turned out 250,000 to 300,000 calendars per day, printed two sides, folded, stitched and slotted for hanging.

In one year's time, it has printed 23,435,000 two color calendars, 9½ x 12½ — 20,193,000 almanacs, 6¾ x 9½ — 32 pages and cover, inside page two colors, cover four colors outside, two colors inside, 43,669,000 two color — 32 page booklets 6¾ x 4¾ with cover, four colors outside and two colors inside.

Single sheets can be delivered at much higher speed.

Dimensions of Press

Length overall	48 ft 6 in
Width overall	15 ft
Height of press	14 ft
Depth of pit	5 ft 6 in
Foundation above floor	2 ft 1 in
Length of cylinder between bearers	54 in
Circumference cylinder between bearers	51 in
Diameter of plate cylinder	15.85
Diameter of impression cylinder	16.09
Diameter of printing circle	16.234
Circumference of bearers on printing circle	51 in

This press is complete with 30 H.P. D.C. motor, and Cutler-Hammer switch board, together with eight stations, and a 15 KW motor generator set, which drives the unit.

Fitted with hardened steel bearers, and self-aligning roller bearings, ink rollers fitted with ball bearings.

Having discontinued publishing almanacs, calendars and booklets, we offer this press and equipment, at an unusually attractive price.

Press and equipment in perfect condition.

For complete information, address—

E. H. Beardsley, Gen. Manager or Fred Lobley, Chief Engineer
Miles Laboratories, Inc., Elkhart, Indiana

FOR SALE

*Mr. Printer:*OUR CONSULTATION DIVISION
INVITES YOUR PROBLEMS ON**Modernization • Replacements
Disposal of Old Equipment
Exchanges • Consolidation
Retirement**

Many years operating as consultants to printers equips us to serve you confidentially and expertly. Never in the graphic arts history has printing machinery brought prices such as prevail today. Never has there been a better opportunity to make important decisions.

Perhaps you have been thinking for some time of retiring. Ask us to advise you. Write freely and in confidence on any problems listed above, or others which concern printing production and equipment. You will receive prompt and helpful service.

DESIRED AT PREMIUM PRICES

PAPER CUTTERS • MIEHLE UNITS
2 COLOR UNITS • 4 POST EMBOSERS
OFFSET EQUIPMENT
BINDERY EQUIPMENT

CURRENT OFFERINGS

PRESSES

32x44 4-post Seybold Embosser, mechanical
feeder and rear delivery

2 Pony Miehl's

Peerless Automatic

12x18 Miller

15½x22 Golding Jobber

38x32 Dexter Folder with cross feeder

36x48 Dexter Folder & Feeder Model 190

Single Fold Hall with McCain Feeder, size 28x35"

21x28 Baum Folder Automatic

50" Inman Sitter and Rewinder with 40 Heads
AC motor

44x64 U.P.M. Bronzer

Several Fuchs and Lang Bronzers (smaller)

Schwartz Feeder for 7/0 Miehl's

Wesol Dura Plate Molding Press, Size 26x28

Original Master Gravure Screen, size 14½x17½
175 line (Ethascreen)

62" Seybold Knife Grinder.

PRINTERS EXCHANGE

Producers of The Speedsealer

705 S. WELLS ST., CHICAGO 7

(Continued on next page)

WHEN YOU THINK OF
WRITING... THINK OF

Whiting

A slogan that is known from the crowded metropolitan centers to the cross roads of the country!

The business man who wishes to express the character of the firm he represents uses a Watermarked Paper made by Whiting. The social world from the boulevards to main street uses Whiting's Stationery Papers for their quality and prestige.

With this reputation for quality, printers, engravers and lithographers are assured of a satisfied customer whenever they recommend a paper made by Whiting.

Whiting's Sterling Ledger is an 85% Rag content paper, and in this paper are embodied all the better qualities of good ledger paper. It has an excellent surface for printing and ruling; and it has been adopted as standard by many of the foremost printers and rulers throughout the country.



Price List Furnished on Application

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MILLS: HOLYOKE, MASSACHUSETTS

111 N. Canal St., Chicago 6, Ill.
10 High Street, Boston 10, Mass.154 West 14th St., New York 11, N. Y.
619 Chestnut St., Philadelphia 5, Pa.

Rouse TIME SAVING
EQUIPMENT FOR PRINTERS

Mitering Machines • Composing Sticks • Slug Clippers
Band Saws • Lead and Rule Cutters • Type Gauges

H. B. ROUSE & CO., 2214 N. Wayne Ave., Chicago 14, Ill.

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(Continued on next page)



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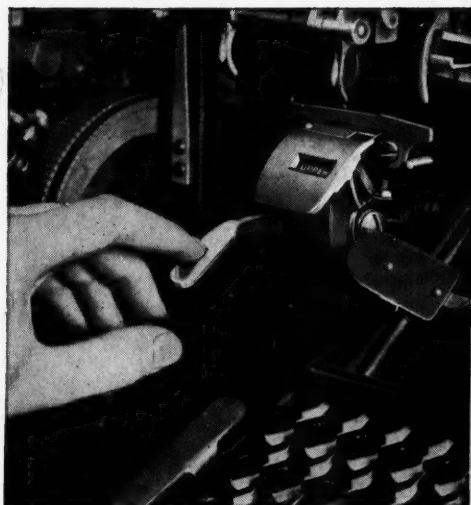
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